Polychrome Manufacturing Site
WESTCHESTER COUNTY

YONKERS, NEW YORK

Periodic Review Report
December 31, 2019 – April 30, 2021

BCP Site Number: C360098
AKRF Project Number: 180132

Prepared for:

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P.E. CERTIFICATION

I, Rebecca Kinal, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP) dated December 2019, and I certify that the documentation of site management activities is accurately presented in the December 31, 2019 to April 30, 2021 Periodic Review Report for the Polychrome Manufacturing Site (BCP Site No. C360098).

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

1. The institutional control or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER), with the exceptions cited in this Periodic Review Report;
2. Nothing has occurred that would impair the ability of such institutional control and engineering control to protect public health and the environment;
3. Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control; and
4. Access to the site will continue to be provided to DER to evaluate the remedy, including access to evaluate the continued maintenance of these controls.

_____ _____ _____

NYS Professional Engineer #082046-1 Date Signature

EXECUTIVE SUMMARY

This Periodic Review Report (PRR) is a required element of the Site Management Plan (SMP) for the Polychrome Manufacturing Site (also known as "Polychrome East" or "Building 3") located in Yonkers, New York (hereinafter referred to as the "Site"). The Site is approximately 2.3 acres and is located at 80-94 Alexander Street, City of Yonkers, Westchester County, New York. The Site is also identified on the City of Yonkers Tax Map as Section 2, Block 2608, Lot 35. The Site is in the New York State Brownfield Cleanup Program (BCP) as Site No. C360098, which is administered by the New York State Department of Environmental Conservation (NYSDEC).

Alex I East, LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C360098-06-12) with NYSDEC on September 19, 2012 to remediate the Site as a Volunteer. The BCA was amended on April 13, 2016 to include Avalon Yonkers Sun Sites, LLC (Avalon) as a Volunteer. Collectively, Alex I East, LLC and Avalon are hereinafter referred to as the Volunteers. The Site was remediated in accordance with the December 2019 Final Engineering Report (FER), and received its Certificate of Completion (COC) on December 31, 2019.

After completion of the remedial work, some residual contamination remained at the Site, hereafter referred to as "Remaining Contamination." Institutional Controls and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to Remaining Contamination and ensure protection of public health and the environment. An Environmental Easement granted to NYSDEC and recorded with the Westchester County Clerk requires compliance with the SMP and all associated ECs and ICs.

This PRR was prepared for the period from December 31, 2019 to April 30, 2021 to document site management activities following Site redevelopment. Subsequent annual PRR submissions will be completed starting May 30, 2022, unless otherwise approved or directed by NYSDEC.

The purpose of this PRR is to document the site management activities associated with the Site's ECs and ICs and to certify that the controls are being implemented in accordance with the SMP. Specifically, this PRR documents the environmental management activities performed following Site redevelopment, which included the following: an annual inspection of the permanent Site-wide Cover System; start-up and routine/detailed inspections of the sub-slab depressurization system (SSDS); annual groundwater sampling; groundwater monitoring and non-aqueous phase liquid (NAPL) well monitoring and recovery [specifically coal tar or dense non-aqueous phase liquid (DNAPL)]; work zone air monitoring during DNAPL removal events; non-hazardous and hazardous investigation derived waste (IDW) disposal; and site grading activities with topsoil from NYSDEC-approved sources.

The following monitoring events occurred during this reporting period and are required for the next reporting period, as outlined below:

SMP Monitoring Plan Schedule

Monitoring Program	Frequency*	Monitoring Parameter	Inspection or Means	Date Completed
Site-wide Inspection	Annually	Site-wide Surface Conditions	Visual inspection of observable surface conditions and condition of exposed ECs.	12/18/2020
SSDS Routine/ Detailed Inspections	Quarterly (first year)/ Annually (after first year)	Flow Rate (each riser)	Visual inspection of flow sensor to confirm within operating range [40 to 100 cubic feet per minute (cfm)]	01/25/2021 (Startup); 03/25/2021
		Vacuum Reading (each blower)	Visual inspection of magnehelic gauges to confirm within operating range (0.5 to 10 inches of H_2O)	01/25/2021 (Startup); 03/25/2021
		Induced Vacuum (vacuum monitoring points)	Visual inspection of monitoring points to confirm within operating range (a minimum of 0.005 inches of H_2O)	01/25/2021 (Startup); 03/25/2021
Groundwater Sampling	Annually	Residual Site-wide Subsurface Contamination	Sampling of MW-A through MW-D for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals using low flow methodology	12/8/2020 through 12/9/2020; 02/22/2021; and 02/24/2021
Recovery Well Gauging & Coal Tar Recovery	Weekly/ Biweekly/ Monthly	DNAPL Thicknesses and Recovery	Gauging/Recovery of coal tar from NW-5, NW-6, NW-8, NW-9, NW-10, and NW-11; Coal tar recovery required when >6" of DNAPL was present	01/2020 - 04/2020 (monthly); 05/2020 - 06/2020 (weekly); 07/2020 – 04/2021 (biweekly)

Routine and detailed operations inspections were performed following the SSDS startup on January 25, 2021 during the March 25, 2021 quarterly inspection on to identify/rectify any operational issues, such as malfunctioning SSDS risers, piping runs, and/or other system components. Operation inspection items included:

- Confirmation that the blower (fan) is operating and air is discharging through the exhaust stack on the roof;
- Confirmation that the vacuum gauge on each riser is clean and readings are within normal ranges;
- Confirmation that the flow sensor on each riser is clean and readings are within normal ranges;
- Confirmation/assessment of blower performance and integrity (including assessing the necessity for a replacement);

- Confirmation that the induced vacuum readings at MP-1 though MP-4 are within normal ranges; and
- Confirmation/assessment of the structural integrity of concrete floor slabs overlying constructed SSDS piping runs.

Results of the SMP Monitoring Plan and Operation and Maintenance (O&M) Plan inspections are detailed below.

Site Wide Inspection

An annual Site-wide Inspection was performed by AKRF on December 18, 2020. The Site-wide Inspection included a visual inspection of observable surface conditions for evidence of damage (e.g., cracking, holes, etc.). The Site-wide Cover System was observed in good condition throughout all portions of the Site. Minor evidence of surficial cracks, none of which breached the Site-wide Cover System, were observed in the parking garage during the inspection and no corrective measures were necessary.

SSDS Inspection

The preliminary SSDS startup was performed on January 25, 2021, with the first routine/detailed SSDS inspection completed that same quarter on March 25, 2021. During the preliminary inspection, it was noted that only one differential pressure switch was installed, which was preventing the SSDS alarm function from working properly. It should be noted that the differential pressure switch operation does not impact the SSDS functionality, as the purpose of the differential pressure switches are limited to the SSDS alarm function. Avalon was notified and a second differential pressure switch was installed.

On March 25, 2021, AKRF performed the first routine/detailed SSDS inspection. During both SSDS inspections, the SSDS blower/fan was operating properly and air was observed discharging through the exhaust stack on the roof. All vacuum and flow rate gauges were observed in clean condition. Applied vacuum and flow rate readings on the SSDS riser were observed to be within normal operating ranges during the start-up (01/25/2021). During the March 25, 2021 quarterly SSDS inspection, the flow rates were within normal operating ranges, but the applied vacuum was below 0.5 in H_2O (reported at 0.3 to 0.4 in H_2O). The induced sub-slab vacuum readings at the SSDS monitoring points (0.094 to 0.16 in H_2O) exceeded the minimum vacuum requirements to demonstrate negative pressure below the building slab (>0.005 inches of H_2O). While the applied vacuum readings for the SSDS were below the operating range of 0.5 to 10 in H_2O in March 2021, the flow rate readings and induced vacuum at the monitoring points were within expected ranges, which indicate that the system is effectively inducing a vacuum below the building slab.

Groundwater Sampling

Annual groundwater sampling was performed on December 8 and 9, 2020, with additional emerging contaminant sampling for 1,4-dioxane completed between February 22 and 24, 2021. Groundwater samples were collected from groundwater monitoring wells MW-A through MW-D for analysis of Target Compound List (TCL) VOCs by United States Environmental Protection Agency (EPA) Method 8260, TCL SVOCs by EPA Method 8270D, and Target Analyte List (TAL) metals (total and dissolved). At NYSDEC's request, supplemental groundwater samples were collected at groundwater monitoring wells MW-1 through MW-D on February 22 and 24, 2021, and analyzed for emerging contaminants (1,4-dioxane only). Based on the annual sampling results, which showed elevated coal tar-related contaminants in the southwestern portion of the Site in MW-D, AKRF recommends continued groundwater monitoring on an annual basis at MW-C and MW-D for TCL VOCs by EPA Method 8260 and TCL SVOCs by EPA Method 8270D. Based on the 1,4-dioxane results, AKRF also recommends continued groundwater monitoring on an annual basis at MW-B and MW-D for 1,4-dioxane by EPA Method 8270SIM. Future sampling for the remaining wells is not recommended based upon the baseline and subsequent annual sampling results,

which showed only minor VOC and SVOC detections in these wells. Continued groundwater sampling for metals is not recommended.

Recovery Well Gauging and Coal Tar Recovery

AKRF, in consultation with NYSDEC, performed monthly gauging at various frequencies during the reporting period at the following groundwater monitoring and NAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. On April 15, 2020, NYSDEC requested via email that NAPL monitoring wells (wells designated with "NW") be gauged on a more frequent (weekly or biweekly) basis. Following receipt of NYSDEC's April 15, 2020 email, AKRF conducted weekly gauging at the NAPL recovery wells until July 8, 2020, at which time NYSDEC allowed for the gauging frequency to be reduced to biweekly (every other week). Biweekly gauging events were continued through the remainder of the reporting period.

DNAPL removal activities were completed by Eastern Environmental of Manorville, New York (Eastern), with AKRF oversight, utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well on NAPL recovery wells with 6-inches or more of measurable DNAPL. During the reporting period, a total of 338.5 gallons of DNAPL were containerized in 55-gallon Department of Transportation (DOT)-approved drums that were removed, transported, and disposed of at the appropriate receiving facility. Some of the recovered volume of DNAPL likely included some entrained groundwater generated during the recovery events.

During the DNAPL coal tar gauging and pumping events, AKRF performed air monitoring within the work zone using handheld equipment to monitor VOCs, oxygen, and hydrogen sulfide (H_2S), in accordance with the SMP. No VOC or H_2S exceedances were recorded during the DNAPL removal activities for the reporting period.

Additional Disposal Information

On October 6, 2020 the EPA assigned the Site EPA ID NYR000247510 due to the ongoing handling and off-site disposal of the on-site DNAPL coal tar as hazardous waste. During the annual hazardous waste reporting period (2020 calendar year only), a total of six 55-gallon drums of DNAPL (estimated at 1,850 pounds) were removed during the DNAPL pumping events by Veolia Environmental Services (VES) for off-site disposal as hazardous waste at their facility in Flanders, New Jersey. The 2020 Annual Hazardous Waste Report was submitted to NYSDEC on February 24, 2021. During the PRR reporting period, a total of 7 drums were removed for off-site disposal by VES.

Transportation and disposal of soil excavated from below Alexander Street for sanitary sewer and water line connections was completed on February 20 and 21, 2020. A total of 48.40 tons of soil were transported for off-site disposal at Clean Earth of Carteret in Carteret, New Jersey (represented by sample PCE-WC-24-1002019).

During the PRR reporting period, Brookside Environmental of Copiague, New York (Brookside), removed three drums of decontamination fluids, two drums of used personal protective equipment (PPE) and oily debris generated during previous DNAPL recovery events, and two drums of purged groundwater from the 2019 baseline and 2020 annual groundwater sampling events for off-site disposal as non-hazardous waste at Clean Waters of New York in Staten Island, New York.

Eastern removed seven miscellaneous drums of soil and liquids generated during previous drilling events (represented by composite waste classification samples WC-1_20201125, WC-2_20201125, and WC-3_20201125 collected on November 25, 2020), three drums of used PPE, oily debris, and the 1-inch PVC vacuum pipes removed from recovery wells NW-3 and NW-4 for off-site disposal as non-hazardous waste at Clean Waters of New York in Staten Island, New York.

Import

During the reporting period, a total of 8.16 tons of ¾-inch gravel and 117.74 tons of trap rock screenings (refer to Import Submittal numbers 2 and 5, respectively) were imported to the Site from the Tilcon West Nyack Quarry in West Nyack, New York, and used for general grading above the Site-wide Cover System.

Summary

Based on the SMP Monitoring Plan and O&M Plan inspection results for this reporting period (December 31, 2019 to April 30, 2021), the ECs/ICs remain effective and protective of human health and the environment. No corrective measures or changes to any ECs/ICs are recommended at this time. Proposed changes to the SMP to reflect the updated groundwater monitoring program and operating parameters for the SSDS will be submitted to NYSDEC for review and approval.

1.0 INTRODUCTION

This Periodic Review Report (PRR) is a required element of the Site Management Plan (SMP) for the Polychrome Manufacturing Site (also known as "Polychrome East" or "Building 3") located in Yonkers, New York (hereinafter referred to as the "Site"). The Site is approximately 2.3 acres and is located at 80-94 Alexander Street, City of Yonkers, Westchester County, New York. The Site is also identified on the City of Yonkers Tax Map as Section 2, Block 2608, Lot 35. The Site is in the New York State Brownfield Cleanup Program (BCP) as Site No. C360098, which is administered by the New York State Department of Environmental Conservation (NYSDEC).

Alex I East, LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C360098-06-12) on September 19, 2012 with NYSDEC to remediate the Site as a Volunteer. The BCA was amended on April 13, 2016 to include Avalon Yonkers Sun Sites, LLC (Avalon) as a Volunteer. Collectively, Alex I East, LLC and Avalon are hereinafter referred to as the Volunteers. The Site was remediated in accordance with the December 2019 Final Engineering Report (FER), and received its Certificate of Completion (COC) on December 31, 2019.

After completion of the remedial work, some residual contamination remained at the Site, hereafter referred to as "Remaining Contamination." Institutional Controls and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to Remaining Contamination and ensure protection of public health and the environment. An Environmental Easement granted to NYSDEC and recorded with the Westchester County Clerk requires compliance with the SMP and all associated ECs and ICs.

As outlined in the SMP, PRRs are to be submitted on an annual basis beginning 16 months after issuance of the COC, unless otherwise approved or directed by NYSDEC.

1.1 Site Location and Description

The Site is located in Yonkers, Westchester County, New York, and is identified as Section 2, Block 2608, Lot 35 on the Yonkers Tax Map. The Site is bounded by: Ashburton Avenue to the north, beyond which is the Greystone Bakery Voluntary Cleanup Program (VCP) site (No. V00361), located on the former Consolidated Edison (Con Ed) Woodworth Avenue Manufactured Gas Plant (MGP) site and the Metro North accessory building site; the Metro North Rail Road Right-of-Way (ROW) to the east; Alexander Street to the west, followed by mixed commercial and industrial uses and a five-story development along the water to the west and northwest; and commercial use properties to the south. Figures showing the Site location and Site layout are provided as Figure 1 and Figure 2, respectively.

Site redevelopment, completed by Avalon between July 2018 and February 2021, included construction of one large U-shaped, five-story residential building surrounding a connected, open-air parking garage; and landscaped areas, grass pavers, and a short asphalt road along the eastern and southern Site boundaries. The Site zoning designation at the time of this PRR is Industrial; however, the City of Yonkers adopted a Planned Urban Redevelopment (PUR) special use permit that allows redevelopment with multi-family residential use. The Polychrome Research and Development BCP Site (C360099, also known as "Polychrome West") and the former Halstead Quinn/ATI Tank Farm BCP Site (C360090) to the northwest and west of the Site, respectively, across Alexander Street, were also redeveloped by Avalon with similar residential use.

1.2 Site History

The Site was developed prior to 1898. Historical Site uses were varied and included, but were not limited to: a lumber yard, a brewing company, a beer depot, operations by an oil company, a post

office garage, a bakery, and operations by a photochemical company (known as Polychrome Corporation). Alex I East, LLC entered into a Brownfield Cleanup Agreement (BCA) (Index No. C360098-06-12) on September 19, 2012 with NYSDEC to remediate the Site as a Volunteer. The BCA was amended on April 13, 2016 to include Avalon as a Volunteer. The Site was redeveloped as part of a larger redevelopment project also encompassing the two adjacent sites, Polychrome Research and Development BCP site (C360099) and former Halstead Quinn/ATI Tank Farm BCP Site (C360090).

Various Phase I and Phase II Environmental Site Assessments (ESAs) (including subsurface drilling) were completed at the Site between November 2006 and 2012. The environmental impacts documented during the Phase II ESAs were used as the basis for entering the BCP and development of the subsequent Remedial Investigation (RI). Between 2015 and 2016, Paulus, Sokolowski, and Sartor Engineering, PC (PS&S) conducted the RI. Following additional consultation with NYSDEC and to further refine the Site RI, Supplemental Site Investigation (SI) activities were conducted in accordance with the NYSDEC-approved SI Workplan dated September 5, 2017. RI and SI activities at the Site included the installation of additional soil borings, temporary wells, and soil vapor points, and ultimately a non-aqueous phase liquid (NAPL) source area was identified as documented in the Remedial Investigation Report (RIR). To further delineate the on-site NAPL, a Pre-Design Investigation (PDI) was completed at the Site. Additionally, a fingerprint analysis indicated that the NAPL resembled coal tar, a pyrogenic by-product commonly associated with former MGPs. It was determined that this coal tar-related contamination originated from a source to the north of the Site.

1.3 Remedial History

In 2018 and 2019, a Track 4 remedy was implemented at the Site in accordance with the May 2018 Remedial Action Work Plan (RAWP) prepared by PS&S and the July 2018 Decision Document prepared by NYSDEC. The remedial activities conducted at the Site generally included, but were not limited to the following:

- Excavation and off-site disposal of underground storage tanks (USTs) in Excavation Areas A through E, as specified in the RAWP;
- Removal of an additional UST encountered during remediation;
- Excavation and off-site disposal of soil and historical fill materials from Excavation Areas 1 through 12, as specified within the RAWP;
- Dewatering (including treatment of groundwater) of Excavation Areas in order to assist with the excavation to the final RAWP depths;
- In-situ soil solidification (ISS) of two units (i.e., Treatment Areas) to the depths and extents specified within the RAWP (displayed on Figure 3);
- Installation of a vapor barrier/waterproofing membrane underneath the parking garage, and subgrade components of the SSDS beneath portions of the new building where warranted; and
- Installation of NAPL recovery wells for post remediation monitoring and collection.

The full scope of remediation is documented within the FER for the Site. The Site received its COC on December 31, 2019.

1.4 Building Construction Environmental Management Activities

General building construction activities at the Site occurred during the reporting period; however, no on-site excavation activities occurred below the final cover system. Environmental management

activities performed during building construction included: an annual inspection of the permanent Site-wide Cover System; start-up and routine/detailed inspections of the SSDS; annual groundwater sampling; groundwater monitoring and NAPL well monitoring and recovery; work zone air monitoring during dense non-aqueous phase liquid (DNAPL) removal events; non-hazardous and hazardous investigation derived waste (IDW) disposal; and grading activities with topsoil and backfill from NYSDEC-approved sources. The environmental management activities were performed in compliance with the SMP.

1.5 Permitting and Approvals

During the reporting period, numerous permits were issued for the Site, including sprinkler, fire alarm installation, elevator, and electrical permits. Copies of the permits and approvals are included in Appendix A.

1.6 Remaining Contamination

Remedial excavation activities at the Site occurred between May 2018 and August 2018, which included the excavation of soil exceeding the Site-specific Reuse Criteria (SSRC). Additional Site foundation and utility excavations occurred between August 2018 and October 2019. A total of 12,297.76 tons (or approximately 8,198 cubic yards using a conversion factor of 1.5 tons per cubic yard) of soil/fill was excavated and removed from the Site as part of the remedial excavations.

Following soil/fill remedial excavations, endpoint samples were obtained and analyzed in accordance with the RAWP and/or in consultation with NYSDEC. The laboratory analytical results indicated the presence of one or more semivolatile organic compounds (SVOCs) and metals detected above the NYSDEC Restricted Residential (RRES) Soil Cleanup Objectives (SCOs). The detected SVOCs were polycyclic aromatic hydrocarbons, a class of compounds most commonly found in combustion byproducts that are frequently found in urban fill. All other detected SVOCs were below RRES SCOs.

ISS via excavator bucket mixing was conducted to solidify DNAPL contamination, specifically coal tar, located below the water table at two separate ISS Treatment Areas (identified as ISS Units in the RAWP). The ISS Treatment Area depths and lateral extents were based on data obtained during the PDI.

A network of NAPL recovery and groundwater monitoring wells were installed at the Site. NAPL recovery wells were installed to monitor and recover residual NAPL remaining on-site.

As part of the RI and SI, a total of six soil vapor samples were collected and analyzed by PS&S. Six volatile organic compounds (VOCs)—1,1,1-trichloroethane, cis-1,2-dichloroethene, methylene chloride, trichloroethene, tetrachloroethene, and vinyl chloride—identified in the New York State Department of Health (NYSDOH) Matrix A, Matrix B, and Matrix C, were detected. It is possible that residual soil vapor contamination related to past Site operations and/or off-site sources of contamination exists in the Site subsurface.

Groundwater underlying the Site is impacted by coal tar and potentially other contaminants from on-site and/or off-site sources. Excluding DNAPL recovery (for coal tar), the remedy does not require further groundwater remediation, as groundwater at the Site is not considered to be part of a sole-source aquifer, the majority of the source area's contaminated soils were removed, and natural attenuation of the Remaining Contamination is expected to occur.

Residual contaminated soil remains below the Site-wide Cover System that does not meet the Site-specific SCOs established for the Site and the on-site soil reuse criteria specified in the SMP. Since

Remaining Contamination is present at this Site, ECs and ICs have been implemented to protect public health and the environment for the applicable future use.

2.0 ENGINEERING & INSTITUIONAL CONTROLS PLAN COMPLIANCE REPORT

Since Remaining Contamination is present in the Site subsurface, ECs and ICs are required to protect human health and the environment. This Engineering and Institutional Control Plan Compliance Report describes the procedures for the implementation and management of all ECs and ICs at the Site. The IC/EC Certification Form is also discussed in this section and is included as Appendix B.

2.1 Engineering Controls

Remaining contamination at the Site is addressed by ECs, which are:

1. A Site-wide Cover System consisting of concrete building slabs, soil cover areas with an underlying demarcation layer, pavement, and other hardscape components;
2. A vapor barrier membrane and active SSDS beneath the on-site building; and
3. A network of NAPL recovery wells and groundwater monitoring wells.

2.1.1 Site-wide Cover System

Exposure to Remaining Contamination at the Site is prevented by the Site-wide Cover System. The Site-wide Cover System components were installed as part of the Site's redevelopment activities, and installation is further detailed in the FER. The Site-wide Cover System components consist of the following:

- Soil Cover: A minimum 2-foot-thick surface soil cover consisting of imported soil materials, which meets the lower of Protection of Groundwater and RRES SCOs listed in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375, Table 375-6.8(b). A demarcation layer (which consists of a highly visible orange synthetic snow fence material) is installed beneath the soil cover to visually identify the limits of the cover system component;
- Parking Garage Concrete Slab: A minimum 6-inch-thick concrete building slab for the parking garage area underlain by a vapor barrier (detailed in Section 2.1.2). The vapor barrier acts as the demarcation layer for this component;
- Building Concrete Slab: A minimum 6-inch-thick concrete building slab for the residential building area underlain by a vapor barrier and SSDS (detailed in Sections 2.1.2 and 2.1.3, respectively). The non-woven geotextile fabric beneath the SSDS layer acts as the demarcation layer for this component;
- Asphalt Surface/Driveway: A minimum 2-foot-thick asphalt pavement section consisting of asphalt surface, stone aggregate subbase, clean fill, and an underlying demarcation layer (i.e., highly visible orange synthetic snow fence material); and
- Concrete/Brick Walkways: A minimum 2-foot-thick (in total) sidewalk section consisting of a concrete/brick surface, stone aggregate subbase, clean fill, and an underlying demarcation fabric (i.e., highly visible orange synthetic snow fence material).

Figure 4 presents the location and cross-sections of the Site-wide Cover System components.

2.1.2 Vapor Barrier System

A Vapor Barrier System was installed beneath the building and parking garage concrete slabs. The Vapor Barrier System consists of a Stego® Wrap (20 mil) liner installed beneath the horizontal slab on grade. The vapor barrier system will serve in conjunction with the active SSDS (described in subsequent section) to mitigate the potential for soil vapor intrusion to occur at the Site.

Figure 4 presents the location and typical cross-sections of the Vapor Barrier System. As-built drawings of the Vapor Barrier System are provided as Appendix C.

2.1.3 SSDS

A SSDS was designed and installed beneath residential portions of the on-site building to allow the lateral movement, collection, and venting of potential soil vapor from below the building. The Site-specific design for the SSDS was developed prior to construction of the building. The major components of the SSDS consist of a subgrade 4-inch, Schedule 40 slotted polyvinyl chloride (PVC) piping network installed within a minimum 6-inch-thick layer of gas-permeable aggregate, which is manifolded into a 6-inch Schedule 40 PVC riser, blower, and exhaust stack located on the roof. Three sub-slab vacuum monitoring points were also installed within the building footprint for monitoring purposes.

The SSDS pipes, associated piping, and the vapor barrier were installed at the Site in 2019. The blower and additional appurtenances were installed in 2020, with startup of the SSDS completed on January 25, 2021. Figure 4 presents the location and typical cross-sections of the subgrade SSDS components. As-built drawings of the SSDS are provided as Appendix C.

2.1.4 NAPL Recovery and Groundwater Monitoring Wells

A network of NAPL recovery and groundwater monitoring wells were installed at the Site, as presented on Figure 5. Groundwater monitoring wells were installed to monitor groundwater concentrations on-site. NAPL recovery wells were installed to monitor and recover residual NAPL remaining on-site.

2.2 Institutional Controls

As outlined in the FER, the ICs for this Site are required to: (1) implement, maintain, and monitor EC systems; (2) prevent future exposure to Remaining Contamination; and (3) limit the use and development of the Site to restricted residential, commercial, and industrial uses only. Adherence to these ICs is required by the Environmental Easement and monitored under the SMP. The ICs include the following:

- The Site may be used and developed for restricted residential, commercial, or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater as a source of potable or process water is prohibited without necessary water quality treatment as determined by NYSDOH or Westchester County Department of Health;
- Groundwater monitoring must be performed as defined in the SMP;

- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP or otherwise approved by NYSDEC;
- The Remedial Party or Site Owner is required to complete and submit to NYSDEC a periodic certification of ICs and ECs in accordance with Part 375-1.8 (h)(3), as further detailed in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
- Access to the Site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- A vapor mitigation system must be installed, operated, and maintained for any building developed in the area within the IC boundaries unless otherwise approved by NYSDEC; and
- Vegetable gardens and farming on the Site are prohibited.

ICs identified within the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement, which may occur when the Track 1 SCOs are achieved.

2.2.1 Excavation Work Plan

The Site was remediated for restricted residential use. Any future intrusive work that will penetrate the Site-wide Cover System, or encounter or disturb the Remaining Contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the Excavation Work Plan (EWP) included as Appendix C of the SMP. The SMP requires that work pursuant to the EWP is included in the PRRs. No work pertaining to EWP compliance was conducted during this reporting period.

2.3 Engineering and Institutional Control Certification Form

After completing the required inspections for this reporting period, a qualified environmental professional prepared and signed the NYSDEC PRR IC/EC Certification Form, provided by NYSDEC as Enclosure 2 within the March 22, 2021 letter titled “Reminder Notice: Site Management PRR and IC/EC Certification Submittal”. Inspections were performed in accordance with the procedures set forth in the Monitoring Plan of the SMP (further detailed in Section 3.0 of this PRR) and the Operation and Maintenance (O&M) Plan (further detailed in Section 4.0 of this PRR). A copy of the signed IC/EC Certification Form is provided as Appendix B.

3.0 MONITORING PLAN COMPLIANCE REPORT

The Monitoring Plan of the SMP describes the measures for evaluating the performance and effectiveness of the implemented ECs to contain and provide for proper management of the Remaining Contamination at the Site to protect public health and the environment. ECs at the Site include: the Site-wide Cover System; a vapor barrier beneath the entire building footprint and SSDS beneath residential portions of the Site building; and a network of on-site NAPL recovery and groundwater monitoring wells. AKRF performed the Site-wide Inspection on December 18, 2020, in accordance with the Monitoring Plan. The SSDS system start-up inspection occurred on January 25, 2021, and one quarterly routine/detailed SSDS inspection was performed on March 25, 2021, in accordance with the SMP. NAPL recovery was completed on a weekly to monthly basis from the on-site NAPL recovery wells in consultation with NYSDEC.

Conducted inspections are summarized in the table below and results are detailed in this section.

SMP Monitoring Plan Schedule

Monitoring Program	Frequency*	Monitoring Parameter	Inspection or Means	Date Completed
Site-wide Inspection	Annually	Site-wide Surface Conditions	Visual inspection of observable surface conditions and condition of exposed ECs.	12/18/2020
SSDS Routine/ Detailed Inspections	Quarterly (first year)/ Annually (after first year)	Flow Rate (each riser)	Visual inspection of flow sensor to confirm within operating range [40 to 100 cubic feet per minute (cfm)]	01/25/2021 (Startup); 03/25/2021
		Vacuum Reading (each blower)	Visual inspection of magnehelic gauges to confirm within operating range (0.5 to 10 inches of H_2O)	01/25/2021 (Startup); 03/25/2021
		Induced Vacuum (vacuum monitoring points)	Visual inspection of monitoring points to confirm within operating range (a minimum of 0.005 inches of H_2O)	01/25/2021 (Startup); 03/25/2021
Groundwater Sampling	Annually	Residual Site-wide Subsurface Contamination	Sampling of MW-A through MW-D for VOCs, SVOCs and metals using low flow methodology.	12/8/2020 through 12/9/2020; 02/22/2021; and 02/24/2021
Recovery Well Gauging & Coal Tar Recovery	Weekly/ Biweekly/ Monthly	DNAPL Thicknesses and Recovery	Gauging/Recovery of coal tar from NW-5, NW-6, NW-8, NW-9, NW-10, and NW-11; Coal tar recovery required when >6" of DNAPL was present;	01/2020 - 04/2020 (monthly); 05/2020 - 06/2020 (weekly); 07/2020 – 04/2021 (biweekly)

Site-wide Inspection

An annual Site-wide Inspection was performed by AKRF on December 18, 2020. The Site-wide Inspection included a visual inspection of observable surface conditions for evidence of damage (e.g., cracking, holes, etc.). The Site-wide Cover System was observed in good condition throughout all portions of the Site. Minor evidence of surficial cracks, none of which breached the Site-wide Cover System, were observed in the parking garage during the inspection, and no corrective measures were necessary. The results of the inspection were recorded on the Site-wide Inspection Site Management Form, included in Appendix D. A photographic log is also provided as Appendix E.

SSDS Inspections

Start-up of the SSDS occurred on January 25, 2021. The first quarterly Routine/Detailed SSDS inspection was performed on March 25, 2021. The SSDS inspections included the following:

- Visual inspection of flow sensors to confirm within operating range (40 to 100 cfm);
- Visual inspection of magnehelic gauges to confirm within operating range (0.5 to 10 inches of H_2O); and
- Visual inspection of monitoring points to confirm within operating range (a minimum of 0.005 inches of H_2O).

Applied vacuum and flow rate readings on the SSDS riser were observed to be within normal operating ranges during the start-up (January 25, 2021). During the March 25, 2021 quarterly SSDS inspection, the flow rates were within normal operating ranges, but the applied vacuum was below 0.5 in H_2O (0.3 to 0.4 in H_2O). The induced sub-slab vacuum readings at the SSDS monitoring points (0.094 to 0.16 in H_2O) exceeded the minimum vacuum requirements to demonstrate negative pressure below the building slab (>0.005 inches of H_2O). While the applied vacuum readings for the SSDS were below the operating range of 0.5 to 10 in H_2O in March 2021, the flow rate readings and induced vacuum at the monitoring points were within expected ranges, which indicate that the system is effectively inducing a vacuum below the building slab.

Photographs of the SSDS system components are provided in Appendix E. Quarterly SSDS inspection and maintenance logs that were completed during the reporting period are provided in Appendix F.

Annual Groundwater Sampling

Annual groundwater sampling was performed on December 8 and 9, 2020. Groundwater samples were collected from groundwater monitoring wells MW-A through MW-D for analysis of Target Compound List (TCL) VOCs by United States Environmental Protection Agency (EPA) Method 8260, TCL SVOCs by EPA Method 8270D, and Target Analyte List (TAL) metals (total and dissolved). In consultation with NYSDEC, supplemental groundwater samples were collected on February 22, and 24, 2021 at groundwater monitoring wells MW-A through MW-D and analyzed for emerging contaminants (1,4-dioxane only). Groundwater analytical results indicated the presence of one or more VOCs, SVOCs, and metals detected above their respective NYSDEC Technical Operational Guidance Series (TOGS) Ambient Water Quality Standards and Guidance Values (AWQSGVs), with 1,4-dioxane also reported as present within all four wells at comparable concentrations to the 2019 baseline results.

Based on the annual sampling results, which showed elevated coal tar-related contaminants in the western portion of the Site in MW-D, AKRF recommends continued groundwater monitoring on an annual basis at MW-A and MW-D for TCL VOCs and SVOCs. Based on the 1,4-dioxane results, AKRF also recommends continued groundwater monitoring on an annual basis at MW-B and MW-D for 1,4-dioxane by EPA 8270SIM. Future sampling for the remaining wells is not recommended based upon the baseline and subsequent annual sampling results, which showed only minor VOC and SVOC detections in these wells.

In addition, future groundwater sampling for metals is not recommended based upon only minor detections during previous sampling.

The Polychrome East Annual Groundwater Monitoring Report is provided in Appendix G. Historic groundwater analytical results from the annual groundwater sampling events in 2019 and 2020 are provided in Tables 1a through 1f.

Recovery Well Gauging and Coal Tar Recovery

AKRF, in consultation with NYSDEC, performed gauging at various frequencies during the reporting period at the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. While gauging was initially performed monthly, NYSDEC requested via email on April 15, 2020 that NAPL monitoring wells be gauged on a more frequent (weekly or biweekly) basis. Following receipt of NYSDEC's April 15, 2020 email, AKRF conducted weekly gauging at the NAPL recovery wells until July 8, 2020, at which time NYSDEC allowed for the gauging frequency to be reduced to biweekly (every other week). Biweekly gauging events were continued through the remainder of the reporting period. Groundwater monitoring and NAPL revery well gauging results for the reporting period are provided in Table 2.

DNAPL removal activities were completed by Eastern Environmental of Manorville, New York (Eastern), with AKRF oversight, utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. During the reporting period, a total of 338.5 gallons of DNAPL were containerized in 55-gallon Department of Transportation (DOT)-approved drums that were removed, transported, and disposed of at the appropriate receiving facility. DNAPL recovery totals are provided in Table 3. Some of the recovered volume of DNAPL likely included some entrained water generated during the recovery events.

Health and Safety Air Monitoring

During the DNAPL gauging and pumping events, AKRF performed air monitoring using handheld equipment to monitor VOCs, oxygen, and hydrogen sulfide (H_2S), in accordance with the SMP. Air monitoring was performed within the work zone, and no VOC or H_2S exceedances were recorded during the DNAPL removal activities for the reporting period.

Additional Disposal Information

On October 6, 2020, the EPA assigned the Site EPA ID NYR000247510 due to the ongoing handling and off-site disposal of the on-site DNAPL coal tar as hazardous waste. During the annual hazardous waste reporting period (2020 calendar year only), a total of six 55-gallon drums of DNAPL (estimated at 1,850 pounds) were removed during the DNAPL pumping events by Veolia Environmental Services (VES) for off-site disposal as hazardous waste at their facility in Flanders, New Jersey. The 2020 Annual Hazardous Waste Report was submitted to NYSDEC on February 24, 2021. During the PRR reporting period, a total of 7 drums were removed for off-site disposal by VES.

In February 2020, transportation and disposal of soil excavated from below Alexander Street for sanitary sewer and water line connections were completed on February 20 and 21, 2020. A total of 48.40 tons of soil were transported for off-site disposal at Clean Earth of Carteret of Carteret, New Jersey (represented by sample PCE-WC-24-1002019).

During the PRR reporting period, Brookside Environmental of Copiague, New York (Brookside), removed three drums of decontamination fluids, two drums of used personal protective equipment (PPE) and oily debris generated during previous DNAPL recovery events, and two drums of purged groundwater from the 2019 baseline and 2020 annual groundwater sampling events for off-site disposal as non-hazardous waste at Clean Waters of New York in Staten Island, New York.

Eastern also removed seven miscellaneous drums of soil and liquids generated during previous drilling events (represented by composite waste classification samples WC-1_20201125, WC-2_20201125, and WC-3_20201125 collected on November 25, 2020), three drums of used PPE and oily debris, as well as the 1-inch PVC vacuum pipes removed from recovery wells NW-3 and NW-4 for off-site disposal as non-hazardous waste at Clean Waters of New York in Staten Island, New York.

Hazardous and non-hazardous waste disposal manifests were provided within the monthly progress reports, which are enclosed as Appendix H.

Import

During the reporting period, a total of 8.16 tons of ¾-inch gravel and 117.74 tons of trap rock screenings (refer to Import Submittal numbers 2 and 5, respectively) were imported to the Site from the Tilcon West Nyack Quarry in West Nyack, New York, and used for general grading above the Site-wide Cover System. Documentation for the imported fill is provided in Appendix I.

4.0 OPERATION AND MAINTENANCE COMPLIANCE REPORT

The SMP O&M Plan provides a description of the measures necessary to operate, monitor, and maintain the mechanical components of the remedy selected for the Site. As detailed in the SMP O&M Plan, "routine" and "detailed" system inspections are be performed in accordance with the frequency set forth in the table below.

Schedule of Monitoring/Inspection Reports

Task/Report	Reporting Frequency[1|2]
SSDS Inspections/Report	Quarterly (first year) Annually (after first year)
Site-wide Cover System Inspection Report	Annually
SSDS Maintenance Report	Following Maintenance Event

SSDS Operations

The routine SSDS inspection check consists of a visual inspection noting the flow rate and vacuum readings for each SSDS riser. The routine inspection also includes documenting any alarms or unusual conditions (e.g., unusual odors, leaks, blower noise, etc.). Typical routine maintenance items include:

- Confirmation that the blower is operating and air is discharging through the exhaust stack on the roof; and
- Confirmation that the gauges on each riser are clean and within normal ranges.

The detailed operations check is performed to identify/rectify operations-based maintenance items, such as malfunctioning SSDS risers, piping runs, and/or other system components. Typical detailed maintenance items include:

- Confirm/assess blower performance and integrity;
- Assess blower and determine need for replacement;
- Confirm/assess the operating condition (induced vacuum) of vacuum monitoring points MP-1 though MP-4; and
- Confirm/assess the structural integrity of concrete floor slabs overlying the SSDS piping runs.

The preliminary SSDS start-up inspection on January 25, 2021, with the first routine/detailed SSDS inspection completed that same quarter on March 25, 2021. During the inspections, the SSDS fans were operating properly, and air was observed discharging through the exhaust stacks on the roof. All vacuum and flow rate gauges were observed in clean condition. Vacuum monitoring points MP-1 through MP-4 were each observed in operable condition and properly secured within manholes. No damage was observed to the structural integrity of concrete floor slabs overlying constructed SSDS manifold and piping runs.

SSDS Maintenance

During the SSDS start-up inspection on January 25, 2021, it was noted that only one differential pressure switch was installed, which was preventing the SSDS alarm function from working properly. It should be noted that the differential pressure switch operation does not impact the SSDS functionality as the purpose of the differential pressure switches are limited to the SSDS alarm function. Avalon was notified and a second differential pressure switch was installed. On March 25, 2021, AKRF performed the routine/detailed SSDS inspection and both differential pressure switches were documented as operational.

Recovery Well Maintenance

On May 20, 2020, Eastern removed and replaced the internal 1-inch PVC vacuum pipes located within wells NW-3 and NW-4 with 1-inch stainless steel pipes. The corrosive nature of the coal tar had deteriorated the previously installed PVC, rendering it unusable during removal with a vacuum truck. Eastern removed, decontaminated, and containerized the internal PVC vacuum piping into a DOT-approved 55-gallon drum, which was subsequently transported for off-site disposal as non-hazardous waste (oily debris) at Clean Waters of New York in Staten Island, New York.

5.0 CONCLUSIONS

This PRR was prepared to document the Site management activities associated with the Site's ECs/ICs and to certify that the controls are being implemented in accordance with the 2019 SMP. Based on the inspection results for this reporting period (December 31, 2019 to April 30, 2021), the ECs/ICs remain effective and protective of human health and the environment. All inspections were performed in accordance with the December 2019 SMP. No corrective measures or changes to any ECs/ICs are recommended at this time.

Based on the annual sampling results, which showed elevated coal tar-related contaminants in the western portion of the Site in MW-D, AKRF recommends continued groundwater monitoring on an annual basis at MW-A and MW-D for TCL VOCs via EPA Method 8260 and TCL SVOCs by EPA Method 8270D. Based on the 1,4-dioxane results, AKRF also recommends continued groundwater monitoring on an annual basis at MW-B and MW-D for 1,4-dioxane by EPA 8270SIM. Future sampling for the remaining wells is not recommended based upon the baseline and subsequent annual sampling results. Continued groundwater sampling for metals is not recommended based upon only minor detections during previous sampling. Proposed changes to the SMP to reflect the updated groundwater monitoring program and operating parameters for the SSDS will be submitted to NYSDEC for review and approval.

FIGURES

Service Layer Credits: ESRI Worlwide Street Map data; 2019.

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.

0 800 1,600

SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

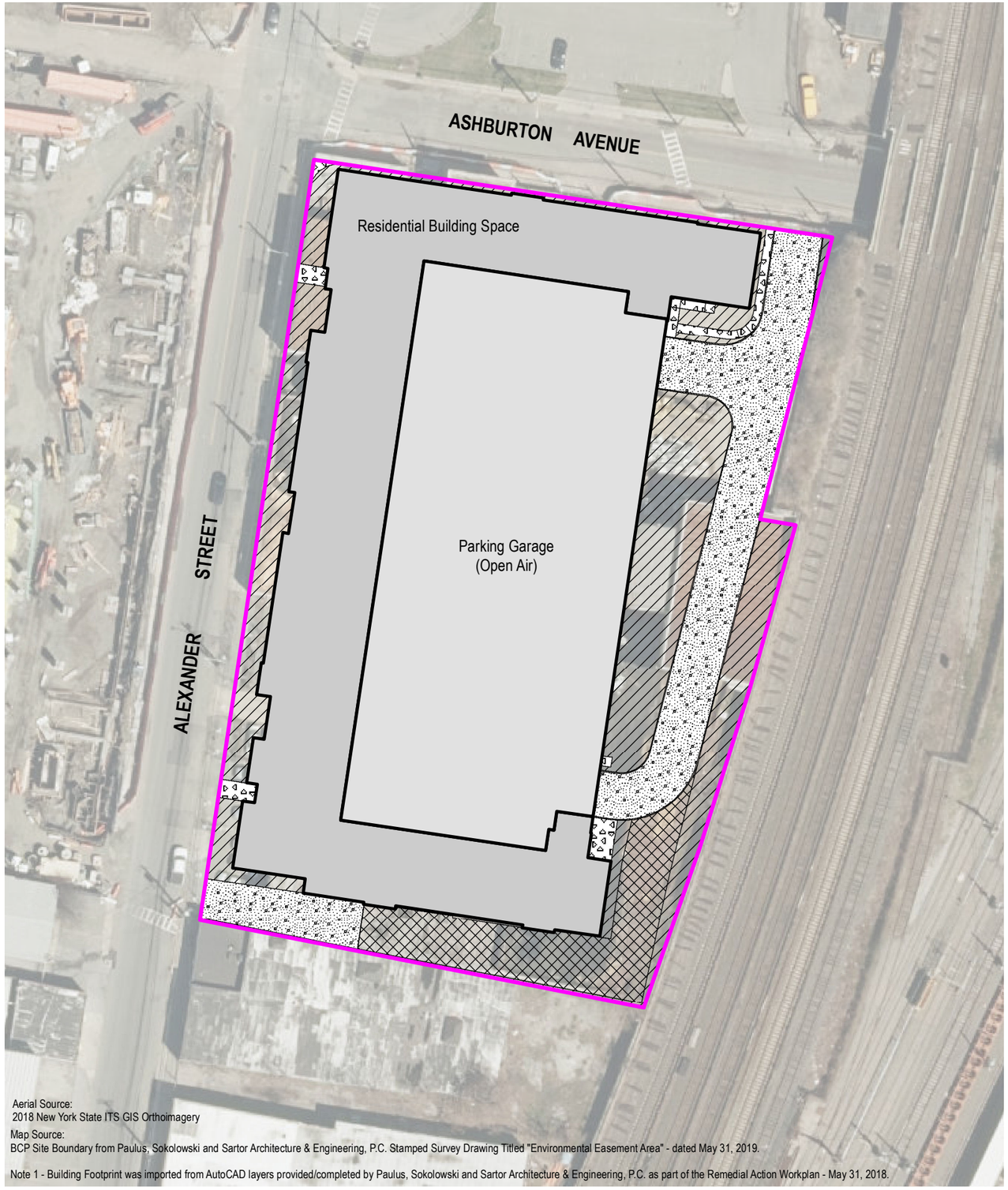
SITE LOCATION MAP

DATE
5/18/2021

PROJECT NO.
180132

FIGURE
1

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\180132 Fig 1 site loc map.mxd12/10/2019 9:45:01 AM mvelleux



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

- BCP SITE BOUNDARY
- RESIDENTIAL BUILDING SPACE
- PARKING GARAGE (OPEN AIR)
- SIDEWALK
- GRASS PAVER
- ASPHALT
- LANDSCAPED

0 30 60 120

SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

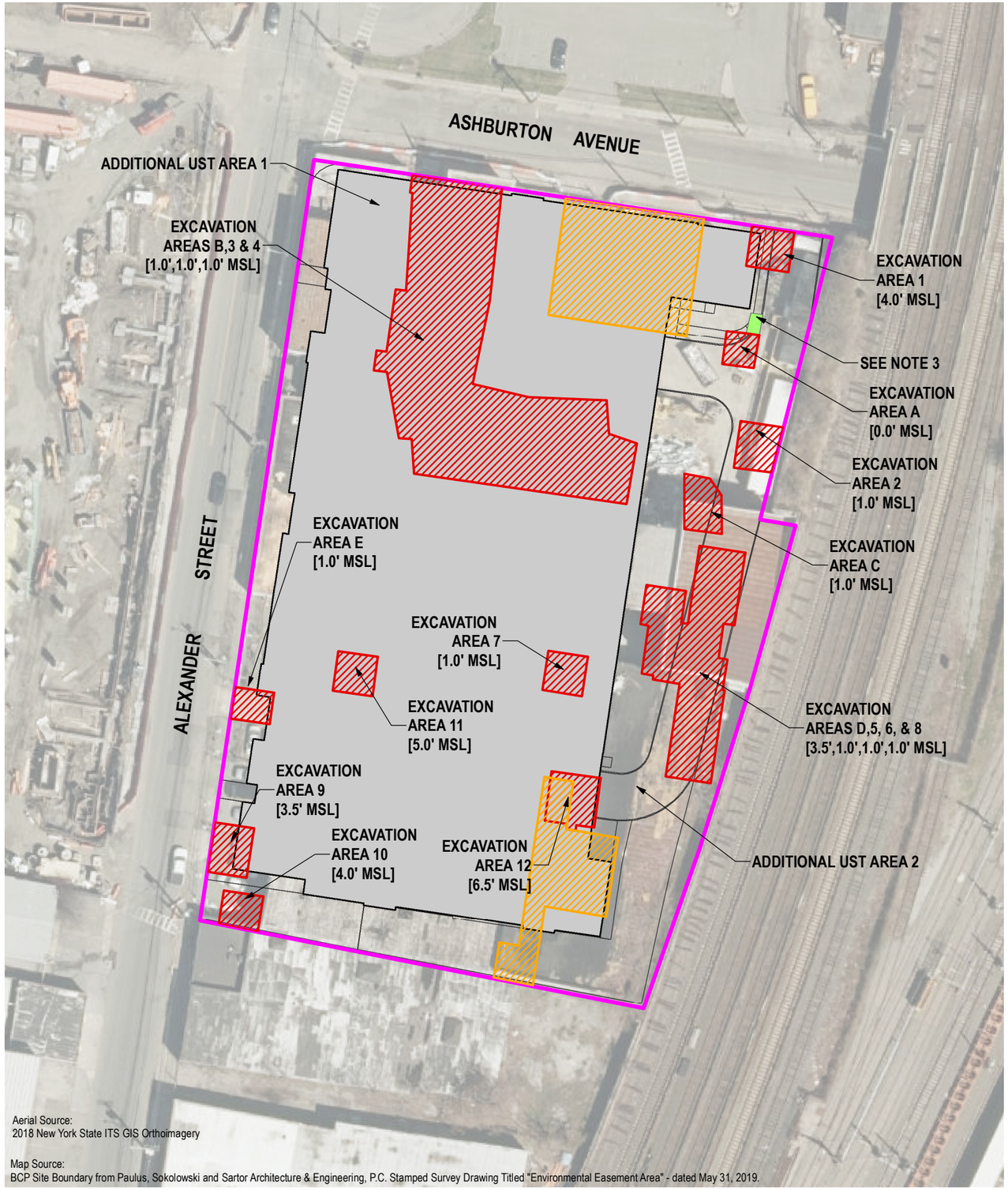
SITE LAYOUT PLAN (GROUND FLOOR)

DATE
5/18/2021

PROJECT NO.
180132

FIGURE
2

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\180132 Fig 2 site layout.mxd 12/10/2019 9:41:22 AM mwelleux



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.

LEGEND

- BCP SITE BOUNDARY
- BUILDING FOOTPRINT
- ISS TREATMENT AREA (OR UNIT)
- EXCAVATION AREA EXTENTS
- NOT EXCAVATED (SEE NOTE 3)

Note 1 - Building Footprint was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

Note 2 - Remedial Excavation and ISS extents were surveyed prior to remedial action by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. and provided as part of the updated "Remedial Action Workplan (RAWP) Remedial Action Site Plan Revisions" - August 9, 2018.

Note 3 - No UST observed within excavation footprint; soil from this portion of Excavation Area A placed back in excavation after consultation with NYSDEC.

0 30 60 120

SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

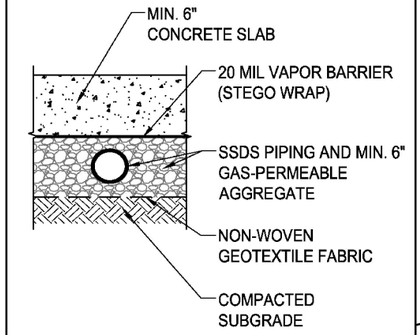
EXTENT OF REMEDIAL ACTION PERFORMED

DATE
5/18/2021

PROJECT NO.
180132

FIGURE
3

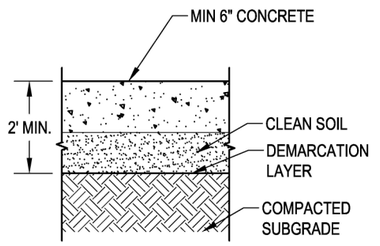
©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\180132 Fig 3 Extent of Remedial Action Performed.mxd12/12/2019 12:34:33 PM mveilleux



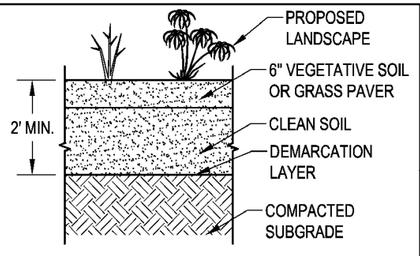
TYPICAL BUILDING SLAB
Not To Scale

NOTE:

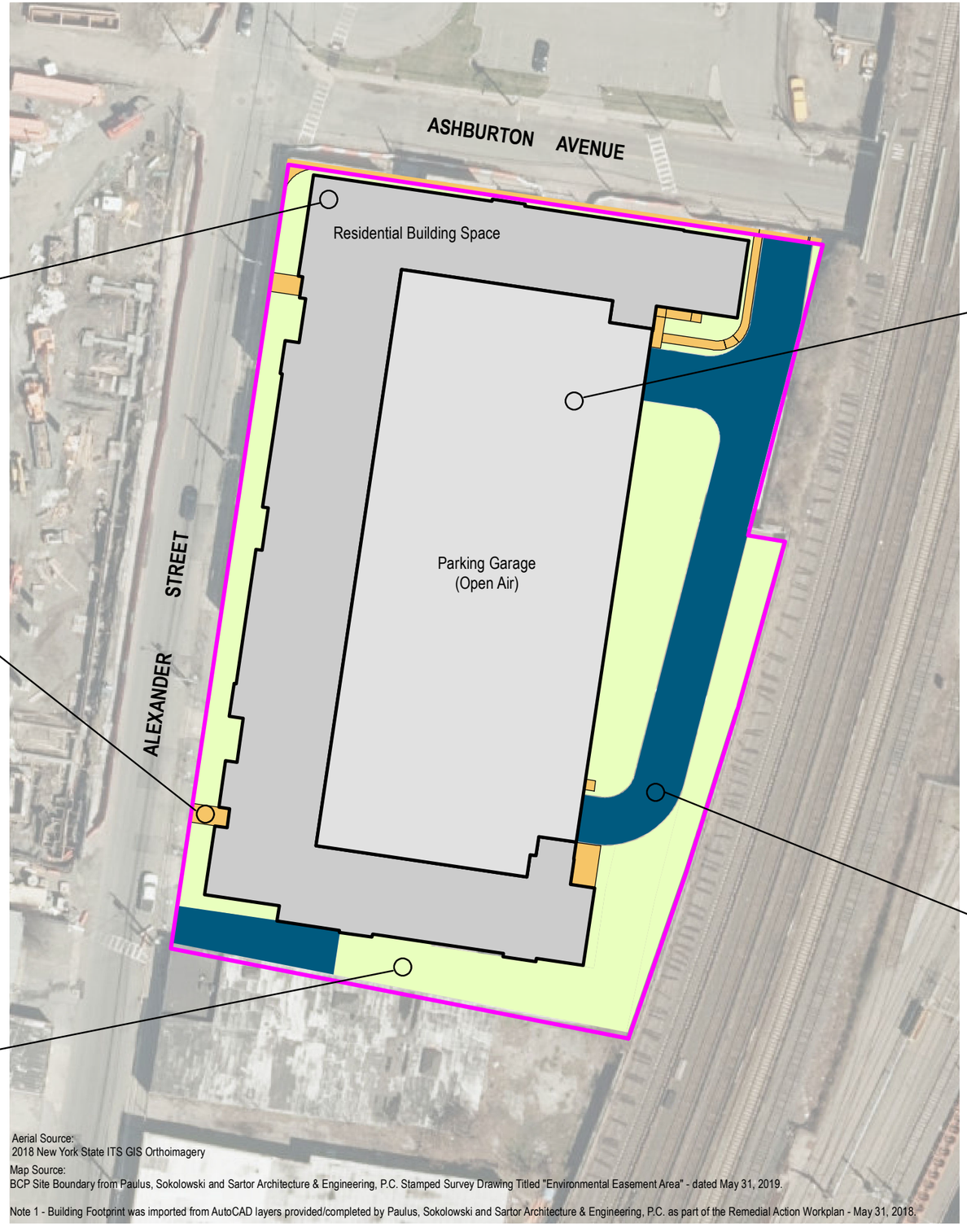
1. SEE APPENDIX E FOR FULL SUB SLAB DEPRESSURIZATION SYSTEM (SSDS) AS-BUILT DRAWINGS.



TYPICAL CONCRETE WALKWAY
Not To Scale



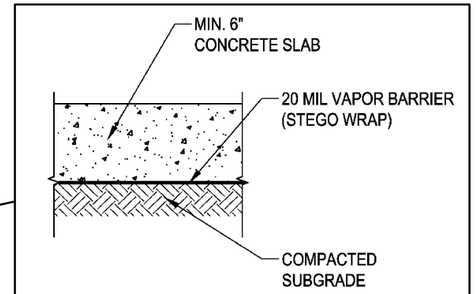
TYPICAL LANDSCAPED AREA
Not To Scale



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.

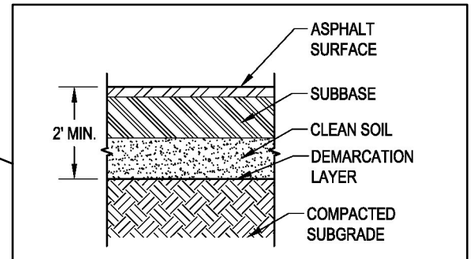
Note 1 - Building Footprint was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.



TYPICAL PARKING GARAGE SLAB
Not To Scale

LEGEND

- BCP SITE BOUNDARY
- RESIDENTIAL BUILDING SPACE
- PARKING GARAGE (OPEN AIR)
- ASPHALT
- SIDEWALK
- LANDSCAPED



TYPICAL ASPHALT SURFACE
Not To Scale

0 30 60 120
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

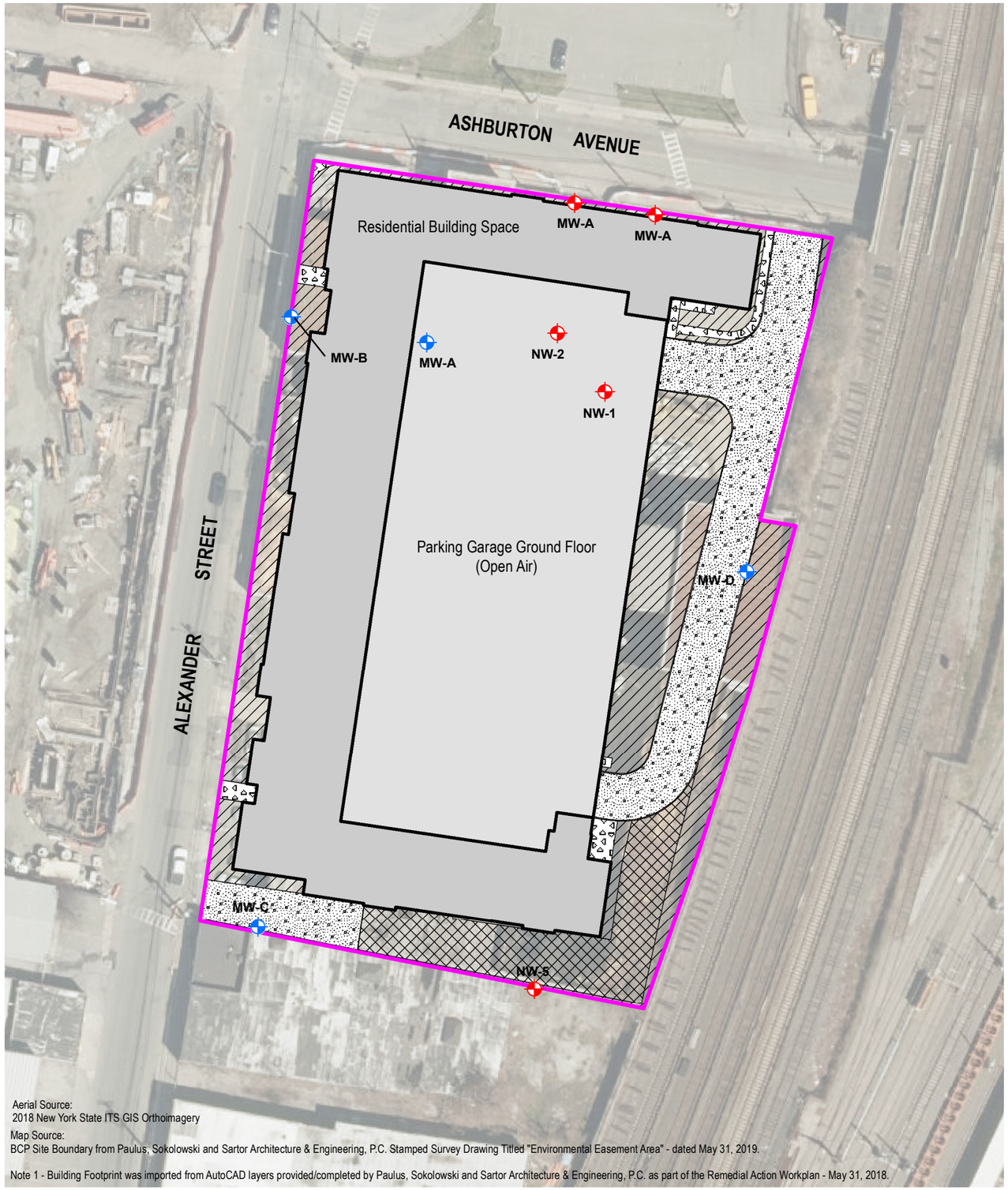
FINAL COVER SYSTEM

DATE
5/8/2021

PROJECT NO.
180132

FIGURE
4

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\180132 Fig 7b Future Cover System.mxd12/12/2019 12:28:12 PM mveilleux



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELL LOCATION PLAN

DATE
5/18/2021

PROJECT NO.
180132

FIGURE
5

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\180132 Fig 4 NAPL Recovery and GW Wells.mxd 12/12/2019 3:50:22 PM mwelleux

TABLES

Table 1A
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Volatile Organic Compounds (VOCs)

	AKRF Sample ID	PCE-MW-A-20191011	MW_A_20201209	PCE-MW-B-20191011	MW_B_20201209	PCE-MW-C-20191015	MW_C_20201208	PCE-MW-D-20191015	MW_D_20201208
	Laboratory Sample ID	L1947800-03	L2054986-01	L1947800-02	L2054986-02	L1948207-01	L2054742-02	L1948207-02	L2054742-01
	Date Sampled	10/11/2019 1:00:00 PM	12/9/2020	10/11/2019 11:25:00 AM	12/9/2020	10/15/2019 11:38:00 AM	12/8/2020	10/15/2019 1:12:00 PM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	2	1	1	1	1	1	5	10
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1,2-Tetrachloroethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,1,1-Trichloroethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,1,2,2-Tetrachloroethane	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
1,1,2-Trichloroethane	1	3 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	7.5 U	15 U
1,1-Dichloroethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,1-Dichloroethene	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
1,1-Dichloropropene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2,3-Trichlorobenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2,3-Trichloropropane	0.04	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2,4,5-Tetramethylbenzene	5	4 UJ	2 U	1.8 J	0.61 J	0.74 J	2 U	10 U	20 U
1,2,4-Trichlorobenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2,4-Trimethylbenzene	**5**	1.5 J	0.71 J	2.5 U	2.5 U	2.5 U	2.5 U	**5.7 JK**	**12 J**
1,2-Dibromo-3-Chloropropane	0.04	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	4 U	2 U	2 U	2 U	2 U	2 U	10 U	20 U
1,2-Dichlorobenzene	3	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,2-Dichloroethane	0.6	1 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
1,2-Dichloroethene, Total	NS	NR	2.5 U	NR	2.5 U	NR	2.5 U	NR	25 U
1,2-Dichloropropane	1	2 U	1 U	1 U	1 U	1 U	1 U	5 U	10 U
1,3,5-Trimethylbenzene (Mesitylene)	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,3-Dichlorobenzene	3	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,3-Dichloropropane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,4-Dichlorobenzene	3	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
1,4-Diethyl Benzene	NS	4 U	NR	2 U	NR	2 U	NR	10 U	NR
2,2-Dichloropropane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
2-Chlorotoluene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
2-Hexanone	50	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
4-Chlorotoluene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
4-Ethyltoluene	NS	4 U	0.78 J	2 U	2 U	2 UJ	2 U	4 JK	7.9 J
Acetone	**50**	16	9.4	5 U	1.6 J	5 U	5 U	28	**65**
Acrylonitrile	5	10 U	5 U	5 U	5 U	5 R	5 U	25 R	50 U
Benzene	**1**	0.76 J	0.78	0.64	0.55	0.21 J	0.5 U	**11**	**14**
Bromobenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Bromochloromethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Bromodichloromethane	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Bromoform	50	4 U	2 U	2 U	2 U	2 U	2 U	10 U	20 U
Bromomethane	5	5 UJ	1.7 J	2.5 UJ	2.5 U	2.5 U	2.5 U	12 U	25 U
Carbon Disulfide	60	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Carbon Tetrachloride	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Chlorobenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Chloroethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Chloroform	7	5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.8 J	12 U	25 U
Chloromethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Cis-1,2-Dichloroethylene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Cis-1,3-Dichloropropene	NS	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Cymene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	12 UJ	25 U
Dibromochloromethane	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Dibromomethane	5	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Dichlorodifluoromethane	5	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Dichloroethylenes	NS	5 U	NR	2.5 U	NR	2.5 U	NR	12 U	NR
Diethyl Ether (Ethyl Ether)	NS	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Ethylbenzene	**5**	5 U	1.7 J	2.5 U	2.5 U	2.5 U	2.5 U	**8.5 JK**	**17 J**
Hexachlorobutadiene	0.5	NR	2.5 U	NR	2.5 U	NR	2.5 U	NR	25 U
Isopropylbenzene (Cumene)	5	5 U	2.5 U	2.2 J	2.5 U	2.5 UJ	2.5 U	12 UJ	25 U
M,P-Xylenes	**5**	5 U	1.6 J	2.5 U	2.5 U	2.5 U	2.5 U	**12**	**23 J**
Methyl Ethyl Ketone (2-Butanone)	50	6.4 J	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Methylene Chloride	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Naphthalene	**10**	**16 J**	**20**	0.73 J	2.3 J	2.5 UJ	2.5 U	**1,000 J**	**1,400**
N-Butylbenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	12 UJ	25 U
N-Propylbenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	12 UJ	25 U
O-Xylene (1,2-Dimethylbenzene)	**5**	5 U	0.98 J	2.5 U	2.5 U	2.5 U	2.5 U	**6.1 J**	**13 J**
p-Diethylbenzene	NS	NR	2 U	NR	2 U	NR	2 U	NR	20 U
Sec-Butylbenzene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U	12 UJ	25 U
Styrene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
T-Butylbenzene	5	5 UJ	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U	12 U	25 U
Tert-Butyl Methyl Ether	10	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Tetrachloroethylene (PCE)	5	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Toluene	**5**	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**10 JK**	**17 J**
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Trans-1,2-Dichloroethene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Trans-1,3-Dichloropropene	NS	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	5 U
Trans-1,4-Dichloro-2-Butene	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Trichloroethylene (TCE)	5	0.69 J	1.8	0.5 U	0.89	0.5 U	0.5 U	2.5 U	5 U
Trichlorofluoromethane	5	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	25 U
Vinyl Acetate	NS	10 U	5 U	5 U	5 U	5 U	5 U	25 U	50 U
Vinyl Chloride	2	2 U	1 U	1.4	0.18 J	1 U	1 U	5 U	10 U
Xylenes, Total	NS	5 U	2.6 J	2.5 U	2.5 U	2.5 U	2.5 U	18 J	36 J

Table 1A
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Volatile Organic Compounds (VOCs)

	AKRF Sample ID	PCE-MW-X-20191015	MW_X_20201209	Field Blank-20191011	FIELD BLANK_20201208	TRIPBLANK-20191015	TRIP BLANK_20201208
	Laboratory Sample ID	L1948207-03	L2054986-03	L1947800-01	L2054742-03	L1948207-06	L2054742-04
	Date Sampled	10/15/2019	12/9/2020	10/11/2019 10:15:00 AM	12/8/2020	10/15/2019	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	5/20 †	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,1,1,2-Tetrachloroethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	7.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichloropropane	0.04	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	5	10 U	2 U	2 UJ	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	**5**	**5.7 J**	0.72 J	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-Chloropropane	0.04	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	10 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	2.5 U	0.21 J	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene, Total	NS	NR	2.5 U	NR	2.5 U	NR	2.5 U
1,2-Dichloropropane	1	5 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene (Mesitylene)	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Diethyl Benzene	NS	10 U	NR	2 U	NR	2 U	NR
2,2-Dichloropropane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chlorotoluene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	50	25 U	5 U	5 U	5 U	5 U	5 U
4-Chlorotoluene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Ethyltoluene	NS	4.1 J	0.77 J	2 U	2 U	2 UJ	2 U
Acetone	**50**	24 J	9.3	5 U	5 U	5 U	5 U
Acrylonitrile	5	25 R	5 U	5 U	5 U	5 R	5 U
Benzene	**1**	**11**	0.75	0.5 U	0.5 U	0.5 U	0.5 U
Bromobenzene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	10 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	12 U	0.97 J	2.5 UJ	2.5 U	2.5 U	2.5 U
Carbon Disulfide	60	25 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethylene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Cis-1,3-Dichloropropene	NS	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cymene	5	12 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U
Dibromochloromethane	50	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	25 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	25 U	5 U	5 U	5 U	5 U	5 U
Dichloroethylenes	NS	12 U	NR	2.5 U	NR	2.5 U	NR
Diethyl Ether (Ethyl Ether)	NS	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	**5**	**8.5 J**	1.7 J	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene	0.5	NR	2.5 U	NR	2.5 U	NR	2.5 U
Isopropylbenzene (Cumene)	5	12 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U
M,P-Xylenes	**5**	**13**	1.6 J	2.5 U	2.5 U	2.5 U	2.5 U
Methyl Ethyl Ketone (2-Butanone)	50	25 U	5 U	5 U	5 U	5 U	5 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NS	25 U	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Naphthalene	**10**	**670 R**	**17**	2.5 UJ	2.5 U	2.5 UJ	2.5 U
N-Butylbenzene	5	12 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U
N-Propylbenzene	5	12 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U
O-Xylene (1,2-Dimethylbenzene)	**5**	**6.3 J**	0.93 J	2.5 U	2.5 U	2.5 U	2.5 U
p-Diethylbenzene	NS	NR	2 U	NR	2 U	NR	2 U
Sec-Butylbenzene	5	12 UJ	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 U
Styrene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
T-Butylbenzene	5	12 U	2.5 U	2.5 UJ	2.5 U	2.5 U	2.5 U
Tert-Butyl Methyl Ether	10	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethylene (PCE)	5	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	**5**	**10 J**	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,2-Dichloroethene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trans-1,3-Dichloropropene	NS	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trans-1,4-Dichloro-2-Butene	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethylene (TCE)	5	2.5 U	1.8	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl Acetate	NS	25 U	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	5 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	NS	19 J	2.5 J	2.5 U	2.5 U	2.5 U	2.5 U

Table 1B
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Semivolatile Organic Compounds (SVOCs)

	AKRF Sample ID	PCE-MW-A-20191011	MW_A_20201209	PCE-MW-B-20191011	MW_B_20201209	PCE-MW-C-20191015	MW_C_20201208
	Laboratory Sample ID	L1947800-03	L2054986-01	L1947800-02	L2054986-02	L1948207-01	L2054742-02
	Date Sampled	10/11/2019 1:00:00 PM	12/9/2020	10/11/2019 11:25:00 AM	12/9/2020	10/15/2019 11:38:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	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
1,2,4-Trichlorobenzene	5	NR	5 U	NR	5 U	NR	5 U
1,2-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U
1,3-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U
1,4-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U
2,4,5-Trichlorophenol	NS	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
2,4-Dichlorophenol	5	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
2,4-Dinitrophenol	10	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
2,6-Dinitrotoluene	5	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
2-Chlorophenol	NS	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	NS	0.05 J	0.79	0.1 U	0.1 U	0.07 J	0.1 U
2-Methylphenol (O-Cresol)	NS	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	5	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
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 U	5 U	5 U
3-Methylphenol/4-Methylphenol	NS	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	5	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 U	10 U
4-Bromophenyl Phenyl Ether	NS	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
4-Chloroaniline	5	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
4-Nitroaniline	5	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
Acenaphthene	**20**	0.1 U	1.6	0.16	0.09 J	12	0.16
Acenaphthylene	NS	0.39	0.8	0.1 U	0.03 J	0.28	0.02 J
Acetophenone	NS	1 J	5 U	5 U	5 U	5 U	5 U
Anthracene	50	0.16	0.92	0.03 J	0.05 J	0.17	0.02 J
Benzo(a)Anthracene	**0.002**	**0.13**	**0.3**	**0.12**	**0.04 J**	**0.27**	**0.03 J**
Benzo(a)Pyrene	**ND**	**0.07 J**	**0.16**	**0.04 J**	**0.03 J**	**0.03 J**	**0.02 J**
Benzo(b)Fluoranthene	**0.002**	**0.08 J**	**0.15**	**0.05 J**	**0.03 J**	**0.03 J**	**0.02 J**
Benzo(g,h,i)Perylene	NS	0.04 J	0.09 J	0.1 U	0.02 J	0.02 J	0.1 U
Benzo(k)Fluoranthene	**0.002**	**0.03 J**	**0.05 J**	**0.02 J**	0.1 U	**0.02 J**	**0.02 J**
Benzoic Acid	NS	50 U	8.8 J	50 U	50 U	50 U	50 U
Benzyl Alcohol	NS	2 U	2 U	2 U	2 U	2 U	2 U
Benzyl Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Biphenyl (Diphenyl)	**5**	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Chloroethoxy) Methane	5	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
Bis(2-Chloroisopropyl) Ether	5	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Ethylhexyl) Phthalate	5	3 U	1.8 J	3 U	1.6 J	3 U	3 U
Carbazole	NS	2 U	2 U	2 U	2 U	2 U	2 U
Chrysene	**0.002**	**0.12**	**0.21**	**0.08 J**	**0.02 J**	**0.02 J**	**0.01 J**
Dibenz(a,h)Anthracene	NS	0.1 U	0.02 J	0.1 U	0.1 U	0.02 J	0.1 U
Dibenzofuran	NS	2 U	2 U	2 U	2 U	2 U	2 U
Diethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Dimethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Di-N-Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Di-N-Octylphthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	50	0.92	0.72	0.17	0.07 J	0.07 J	0.04 J
Fluorene	**50**	0.11	0.88	0.04 J	0.03 J	1.9	0.03 J
Hexachlorobenzene	0.04	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
Hexachlorocyclopentadiene	5	20 U	20 U	20 U	20 U	20 U	20 U
Hexachloroethane	5	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**	**0.04 J**	**0.1 J**	0.1 U	**0.02 J**	**0.02 J**	0.1 U
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	**10**	0.21	2.7	0.1 U	0.1 U	0.43	0.07 J
Nitrobenzene	0.4	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
N-Nitrosodiphenylamine	50	2 U	2 U	2 U	2 U	2 U	2 U
Pentachlorophenol	NS	0.8 U	0.94	0.8 U	0.8 U	0.8 UJ	0.74 J
Phenanthrene	**50**	0.1 U	0.93	0.1 U	0.05 J	0.71	0.04 J
Phenol	**1**	**2.8 J**	**6.6**	5 U	5 U	5 U	5 U
Pyrene	50	1.4	2	0.32	0.1 J	0.12	0.05 J

Table 1B
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Semivolatile Organic Compounds (SVOCs)

	AKRF Sample ID	PCE-MW-D-20191015	MW_D_20201208	PCE-MW-X-20191015	MW_X_20201209	Field Blank-20191011	FIELD BLANK_20201208	FIELD BLANK_20201208
	Laboratory Sample ID	L1948207-02	L2054742-01	L1948207-03	L2054986-03	L1947800-01	L2054742-03	L2054742-03 R2
	Date Sampled	10/15/2019 1:12:00 PM	12/8/2020	10/15/2019	12/9/2020	10/11/2019 10:15:00 AM	12/8/2020	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1/5/10 †	1/5/20 †	1/5/10 †	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	NR
1,2,4-Trichlorobenzene	5	NR	5 U	NR	5 U	NR	5 U	NR
1,2-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U	NR
1,3-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U	NR
1,4-Dichlorobenzene	3	NR	2 U	NR	2 U	NR	2 U	NR
2,4,5-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4,6-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4-Dichlorophenol	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4-Dimethylphenol	**50**	**52 JK**	**81**	**57 JK**	5 U	5 U	5 U	NR
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U	20 U	NR
2,4-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,6-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2-Chloronaphthalene	10	2 U	4 U	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	NR
2-Methylnaphthalene	NS	1 UJ	130	2.4	0.81	0.1 U	0.04 J	0.1 U
2-Methylphenol (O-Cresol)	NS	60	53	64	5 U	5 U	5 U	NR
2-Nitroaniline	5	5 UJ	5 U	5 UJ	5 U	5 U	5 U	NR
2-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U	NR
3,3'-Dichlorobenzidine	5	5 R	5 U	5 R	5 U	5 U	5 U	NR
3-Methylphenol/4-Methylphenol	NS	160 JK	140	170 JK	5 U	5 U	5 U	NR
3-Nitroaniline	5	5 U	5 U	5 UJ	5 U	5 U	5 U	NR
4,6-Dinitro-2-Methylphenol	NS	10 U	10 U	10 U	10 U	10 U	10 U	NR
4-Bromophenyl Phenyl Ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
4-Chloro-3-Methylphenol	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
4-Chloroaniline	5	5 UJ	5 U	5 UJ	5 U	5 U	5 U	NR
4-Chlorophenyl Phenyl Ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
4-Nitroaniline	5	5 UJ	5 U	5 UJ	5 U	5 U	5 U	NR
4-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U	NR
Acenaphthene	**20**	1 UJ	**84**	13	1.4	0.1 U	0.1 U	0.1 U
Acenaphthylene	NS	0.15 J	33	3.4 J	0.81	0.1 U	0.1 U	0.1 U
Acetophenone	NS	1.6 J	3.3 J	2 J	5 U	5 U	5 U	NR
Anthracene	50	0.64 J	25	2.1 J	0.86	0.1 U	0.1 U	0.1 U
Benzo(a)Anthracene	**0.002**	**2.6**	**2.7**	**1.8**	**0.33**	0.1 U	0.1 U	0.1 U
Benzo(a)Pyrene	**ND**	**2.4 J**	**1.2 J**	**0.94 J**	**0.31**	0.1 U	0.1 U	0.1 U
Benzo(b)Fluoranthene	**0.002**	**3.2 J**	**1.3 J**	**1.5 J**	**0.3**	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)Perylene	NS	1.4	0.48 J	0.68 J	0.5	0.1 U	0.1 U	0.1 U
Benzo(k)Fluoranthene	**0.002**	**1.1 J**	**0.38 J**	**0.48 J**	**0.11**	0.1 U	0.1 U	0.1 U
Benzoic Acid	NS	76 JK	75	92 JK	50 U	50 U	50 U	NR
Benzyl Alcohol	NS	2.6	2 U	3	2 U	2 U	2 U	NR
Benzyl Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Biphenyl (Diphenyl)	**5**	**10**	**22**	**12**	2 U	2 U	2 U	NR
Bis(2-Chloroethoxy) Methane	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	2 U	2 U	2 U	2 U	2 U	2 U	NR
Bis(2-Chloroisopropyl) Ether	5	2 U	2 U	2 U	2 U	2 U	2 U	NR
Bis(2-Ethylhexyl) Phthalate	5	3 U	3 U	3 U	1.7 J	3 U	3 U	NR
Carbazole	NS	52	180	62	2 U	2 U	2 U	NR
Chrysene	**0.002**	**2.1**	**1.6 J**	**1.5**	**0.23**	0.1 U	0.1 U	0.1 U
Dibenz(a,h)Anthracene	NS	0.31 J	2 U	0.15 J	0.07 J	0.1 U	0.1 U	0.1 U
Dibenzofuran	NS	27	57	31	2 U	2 U	2 U	NR
Diethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Dimethyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Di-N-Butyl Phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Di-N-Octylphthalate	50	5 UJ	5 U	5 UJ	5 U	5 U	5 U	NR
Fluoranthene	50	4.2	24	3.1	0.68	0.1 U	0.1 U	0.1 U
Fluorene	**50**	1 UJ	**68**	13	0.7	0.1 U	0.1 U	0.01 J
Hexachlorobenzene	0.04	8 U	16 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobutadiene	0.5	5 U	10 U	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 U	20 U	NR
Hexachloroethane	5	8 U	16 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Indeno(1,2,3-c,d)Pyrene	**0.002**	**1.5**	**0.51 J**	**0.69 J**	**0.44**	0.1 U	0.1 U	0.1 U
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Naphthalene	**10**	1 R	**1,100**	1.7 R	3.2	0.1 U	0.14	0.1 U
Nitrobenzene	0.4	2 U	2 U	2 U	2 U	2 U	2 U	NR
N-Nitrosodi-N-Propylamine	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
N-Nitrosodiphenylamine	50	2 U	2 U	2 U	2 U	2 U	2 U	NR
Pentachlorophenol	NS	8 UJ	16 U	8 UJ	0.86	0.8 U	0.8 U	0.8 U
Phenanthrene	**50**	2.1 J	**120**	12 J	0.84	0.03 J	0.02 J	0.02 J
Phenol	**1**	**280 D**	**510**	**340 D**	**5**	5 U	5 U	NR
Pyrene	50	3.6	19	6.2	1.8	0.1 U	0.1 U	0.1 U

Table 1C
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Metals (Dissolved)

	AKRF Sample ID	PCE-MW-A-20191011	MW_A_20201209	PCE-MW-B-20191011	MW_B_20201209	PCE-MW-C-20191015	MW_C_20201208
	Laboratory Sample ID	L1947800-03	L2054986-01	L1947800-02	L2054986-02	L1948207-01	L2054742-02
	Date Sampled	10/11/2019 1:00:00 PM	12/9/2020	10/11/2019 11:25:00 AM	12/9/2020	10/15/2019 11:38:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	1,450	1,120	4.28 J	5.37 J	10 U	10 U
Antimony	**3**	4 U	**3.42 J**	4 U	1.28 J	4 UJ	1.86 J
Arsenic	**25**	17.31	**37.66**	2.88	3.47	2.97	0.86
Barium	1,000	31.12	8.53	67.8	54.21	57.99	77.92
Beryllium	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	5	0.09 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	NS	56,500	23,300	75,500	67,700	74,800	105,000
Chromium, Total	50	1.01	1.84	1 U	0.3 J	1 U	1 U
Cobalt	NS	1.05	2.9	0.43 J	0.38 J	0.5	0.5 U
Copper	200	7.45	32.03	1 U	1.1	1 U	2.65
Iron	**300**	82.3	75.7	128	**852**	**1,530**	87.1
Lead	25	3.57	1 U	1 U	1 U	1 U	1 U
Magnesium	35,000	33.4 J	25.3 J	13,500	18,100	6,540	6,620
Manganese	**300**	1.07	1 U	292.3	237.5	**468.7**	50.53
Mercury	**0.7**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	8.74	5.25	2 U	1.13 J	1.75 J	1.25 J
Potassium	NS	28,800	17,600	31,900	40,300	8,680	11,200
Selenium	**10**	9.19	**11**	5 U	5 U	5 U	5 U
Silver	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium	**20,000**	**272,000**	**171,000**	**158,000**	**190,000**	**24,600**	**45,800**
Thallium	0.5	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U
Vanadium	NS	26.85	184.8	5 U	1.84 J	5 U	5 U
Zinc	2,000	10 U	10 U	10 U	10 U	19.92	19.06

Table 1C
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Metals (Dissolved)

	AKRF Sample ID	PCE-MW-D-20191015	MW_D_20201208	PCE-MW-X-20191015	MW_X_20201209	Field Blank-20191011	FIELD BLANK_20201208
	Laboratory Sample ID	L1948207-02	L2054742-01	L1948207-03	L2054986-03	L1947800-01	L2054742-03
	Date Sampled	10/15/2019 1:12:00 PM	12/8/2020	10/15/2019	12/9/2020	10/11/2019 10:15:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	149	376	143	1,100	10 U	10 U
Antimony	**3**	1.55 J	2.95 J	1.14 J	2.99 J	4 U	4 U
Arsenic	**25**	15.15	14.79	14.67	**36.12**	0.5 U	0.5 U
Barium	1,000	67.41	55.71	69.56	8.99	7.42	0.5
Beryllium	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	NS	47,500	24,800	49,300	22,400	256	82.5 J
Chromium, Total	50	1.37	1 U	1.41	1.73	0.46 J	1 U
Cobalt	NS	0.29 J	0.82	0.3 J	2.79	0.5 U	0.5 U
Copper	200	17.07	4.04	17.35	32.12	1 U	1 U
Iron	**300**	**613**	26.6 J	**643**	85.1	50 U	50 U
Lead	25	16.76	0.43 J	17.36	1 U	1 U	1 U
Magnesium	35,000	14,600	1,280	14,800	30.3 J	70 U	70 U
Manganese	**300**	**304.4**	1 U	**325.2**	1 U	1 U	1 U
Mercury	**0.7**	**5.95 JK**	**16.23**	**8.43 JK**	0.2 U	0.2 U	0.2 U
Nickel	100	12.01	44.45	11.23	5.56	2 U	2 U
Potassium	NS	75,400	120,000	74,000	17,100	100 U	100 U
Selenium	**10**	5 U	5 U	5 U	**10.9**	5 U	5 U
Silver	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium	**20,000**	**132,000**	**170,000**	**131,000**	**167,000**	1,960	431
Thallium	0.5	0.5 U	0.14 J	0.5 U	1 U	0.5 U	1 U
Vanadium	NS	5 U	5 U	5 U	178.1	5 U	5 U
Zinc	2,000	10.77	10 U	9.83 J	10 U	10 U	10 U

Table 1D
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Metals (Total)

	AKRF Sample ID	PCE-MW-A-20191011	MW_A_20201209	PCE-MW-B-20191011	MW_B_20201209	PCE-MW-C-20191015	MW_C_20201208
	Laboratory Sample ID	L1947800-03	L2054986-01	L1947800-02	L2054986-02	L1948207-01	L2054742-02
	Date Sampled	10/11/2019 1:00:00 PM	12/9/2020	10/11/2019 11:25:00 AM	12/9/2020	10/15/2019 11:38:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	2,170	1,440	69.8	70.5	87.5	82.1
Antimony	**3**	2.29 J	2.7 J	4 U	0.79 J	0.45 J	2.23 J
Arsenic	**25**	15.22	**32.98**	3.13	3.3	4.61	1.59
Barium	1,000	29.81	12.19	80.22	64.5	59.84	80.96
Beryllium	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	5	0.19 J	0.07 J	0.2 U	0.2 U	0.2 U	0.2 U
Calcium	NS	61,600	24,200	70,200	65,200	72,400	102,000
Chromium, Total	50	4.07	4.27	0.6 J	1 U	1 U	1 U
Cobalt	NS	1.43	3.14	0.62	0.48 J	0.54	0.19 J
Copper	200	22.25	40.01	1 U	3.2	2.64	5.68
Iron	**300**	**1,050**	**790**	**2,220**	**1,670**	**3,190**	**665**
Lead	**25**	17.17	6.73	1.45	1.19	3.21	3.12
Magnesium	35,000	255	194	13,600	17,500	6,260	6,570
Manganese	**300**	17.52	10.94	297.2	237.5	**471**	81.23
Mercury	**0.7**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	10.4	5.82	0.65 J	0.99 J	1.97 J	1.43 J
Potassium	NS	33,800	18,500	31,000	38,800	8,600	10,900
Selenium	**10**	9.95	**11**	5 U	5 U	5 U	5 U
Silver	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium	**20,000**	**269,000**	**174,000**	**154,000**	**184,000**	**23,500**	**44,700**
Thallium	0.5	1 U	1 U	1 U	1 U	0.5 U	0.16 J
Vanadium	NS	40.35	177.7	5 U	1.88 J	5 U	5 U
Zinc	2,000	26.95	9.67 J	3.59 J	10 U	25.44	24.48

Table 1D
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Metals (Total)

	AKRF Sample ID	PCE-MW-D-20191015	MW_D_20201208	PCE-MW-X-20191015	MW_X_20201209	Field Blank-20191011	FIELD BLANK_20201208
	Laboratory Sample ID	L1948207-02	L2054742-01	L1948207-03	L2054986-03	L1947800-01	L2054742-03
	Date Sampled	10/15/2019 1:12:00 PM	12/8/2020	10/15/2019	12/9/2020	10/11/2019 10:15:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1/2 †	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
Aluminum	NS	376	1,620	363	1,480	10 U	10 U
Antimony	**3**	**7.2 J**	**4.56**	1.12 J	2.65 J	4 U	4 U
Arsenic	**25**	16.04	18.82	15.72	**34.74**	0.5 U	0.5 U
Barium	1,000	71.53	87.14	75.46	13.38	2.13	0.19 J
Beryllium	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	5	0.07 J	0.22	0.06 J	0.09 J	0.2 U	0.2 U
Calcium	NS	45,900	37,700	49,700	24,300	100 U	52.9 J
Chromium, Total	50	2.03	2.48	2.16	4.05	0.41 J	1 U
Cobalt	NS	0.32 J	0.95	0.34 J	3.34	0.5 U	0.5 U
Copper	200	42.3	102.6	42.23	41.68	1.28	1 U
Iron	**300**	**1,120 JK**	**791**	**1,250 JK**	**995**	50 U	50 U
Lead	**25**	**38.2**	**74.62**	**38.12**	9.48	1 U	1 U
Magnesium	35,000	13,800	7,720	15,200	240	70 U	70 U
Manganese	**300**	**338.9**	112.4	**364.3**	14.75	1 U	1.18
Mercury	**0.7**	**15.48 JK**	**31.18**	**15.8 JK**	0.2 U	0.2 U	0.2 U
Nickel	100	12.46	38.85	12.45	5.78	2 U	2 U
Potassium	NS	73,500	104,000	76,500	18,500	100 U	100 U
Selenium	**10**	5 UJ	5 U	5 UJ	**11.2**	5 U	5 U
Silver	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium	**20,000**	**124,000**	**160,000**	**132,000**	**175,000**	164	235
Thallium	0.5	0.5 U	0.27 J	0.5 U	1 U	1 U	1 U
Vanadium	NS	1.62 J	2.55 J	1.62 J	177.8	5 U	5 U
Zinc	2,000	43.08	66.7	43.76	13.55	10 U	10 U

Table 1E
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Emerging Contaminants - Per- and Polyfluoroalkyl Substances (PFAS)

	AKRF Sample ID	PCE-MW-C-06102019		PCE-MW-D-06102019		PCE-MW-B-20191024		PCE-EQ-06102019	
	Laboratory Sample ID	L1924653-02		L1924653-01		L1950466-01		L1924653-03	
	Date Sampled	6/10/2019 11:05 AM		6/10/2019 9:55 AM		10/24/2019 12:05:00 PM		6/10/2019 10:05 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	1.23	U	1.22	U	3		1.14	U
8:2 Fluorotelomer sulfonate	NS	1.12	U	1.11	U	2.02	U	1.04	U
N-ethyl perfluorooctanesulfonamidoacetic acid	NS	0.74	U	0.74	U	2.02	U	0.69	U
N-methyl perfluorooctanesulfonamidoacetic acid	NS	0.6	U	0.6	U	2.02	U	0.56	U
Perfluorobutanesulfonic acid	NS	0.12	J	0.14	J	3.07		0.2	U
Perfluorobutanoic acid	NS	5.57		3.03		15.1		0.35	U
Perfluorodecanesulfonic acid	NS	0.9	U	0.9	U	2.02	U	0.84	U
Perfluorodecanoic acid	NS	0.28	U	0.35	J	2.02	U	0.26	U
Perfluorododecanoic acid	NS	0.34	U	0.34	U	2.02	U	0.32	U
Perfluoroheptanesulfonic acid	NS	0.64	U	0.63	U	2.02	U	0.59	U
Perfluoroheptanoic acid	NS	2.77		2.87		7.12		0.19	U
Perfluorohexanesulfonic acid	NS	0.45	J	1.43	J	3.84		0.32	U
Perfluorohexanoic acid	NS	4.9		3.28		14.8		0.28	U
Perfluorononanoic acid	NS	0.33	J	1.08	J	0.887	J	0.27	U
Perfluorooctanesulfonic acid	NS	1.6	J	9.06		10.5		0.43	U
Perfluorooctanoic acid	NS	5.64		16.5		23		0.2	U
Perfluoropentanoic acid	NS	3.84		4.34		18.9		0.34	U
Perfluorotetradecanoic acid	NS	0.23	U	0.23	U	2.02	U	0.21	U
Perfluorotridecanoic acid	NS	0.3	U	0.3	U	2.02	U	0.28	U
Perfluoroundecanoic acid	NS	0.24	U	0.29	J	2.02	U	0.22	U
Perfluroroctanesulfonamide	NS	0.54	U	0.53	U	2.02	U	0.5	U

Table 1F
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Emerging Contaminants - 1,4-Dioxane

	AKRF Sample ID	PCE-MW-A-20191011	MW_A_20201209	PCE-MW-B-20191011	MW_B_20201209	PCE-MW-C-06102019	PCE-MW-C-20191015	MW_C_20201208
	Laboratory Sample ID	L1947800-03	L2054986-01	L1947800-02	L2054986-02	L1924653-02	L1948207-01	L2054742-02
	Date Sampled	10/11/2019 1:00:00 PM	12/9/2020	10/11/2019 11:25:00 AM	12/9/2020	6/10/2019 11:05 AM	10/15/2019 11:38:00 AM	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	2	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,4-Dioxane (P-Dioxane)	NS	10.8	250 U	505	420	0.0326 U	0.839	250 U

Table 1F
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results
Emerging Contaminants - 1,4-Dioxane

	AKRF Sample ID	PCE-MW-D-06102019	PCE-MW-D-20191015	MW_D_20201208	PCE-MW-X-20191015	MW_X_20201209	PCE-EQ-06102019	Field Blank-20191011	FIELD BLANK_20201208	TRIP BLANK_20201208
	Laboratory Sample ID	L1924653-01	L1948207-02	L2054742-01	L1948207-03	L2054986-03	L1924653-03	L1947800-01	L2054742-03	L2054742-04
	Date Sampled	6/10/2019 9:55 AM	10/15/2019 1:12:00 PM	12/8/2020	10/15/2019	12/9/2020	6/10/2019 10:05 AM	10/11/2019 10:15:00 AM	12/8/2020	12/8/2020
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	Dilution Factor	1	1	10	1	1	1	1	1	1
Compound	**AWQSGV**	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q	CONC Q
1,4-Dioxane (P-Dioxane)	NS	189	185	2,500 U	169	250 U	0.742	0.139 U	250 U	250 U

Tables 1A-1F
Polychrome East (BCP No. C360098)
Yonkers, NY
Historic Groundwater Analytical Results

DEFINITIONS

D	:	Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.
J	:	The reported value is estimated
K	:	Reported concentration value is proportional to dilution factor and may be exagerated.
ND	:	The standard is a non-detectable concentration by the approved analytical method.
NR	:	Not reported.
NS	:	No standard.
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.
†	:	Dilution factor varies.
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.

Table 2
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
	9/10/2020	7:30	ND	9.64	ND	15.54	NA	NA	
	9/23/2020	7:15	ND	10.21	ND	15.58	NA	NA	
	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	330.00	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/13/2021	8:15	ND	9.72	ND	15.56	NA	NA	
	1/27/2021	7:15	ND	9.93	ND	15.12	NA	NA	
	2/8/2021	7:30	ND	9.60	ND	15.50	NA	NA	
	2/24/2021	12:50	ND	9.47	ND	15.50	NA	NA	
	3/10/2021	9:00	ND	9.85	ND	15.56	NA	NA	
	3/24/2021	8:36	ND	9.92	ND	15.56	NA	NA	
	4/7/2021	7:45	ND	9.77	ND	15.50	NA	NA	
	4/21/2021	8:30	ND	9.65	ND	15.51	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
	9/10/2020	7:35	ND	8.80	ND	18.78	NA	NA	
	9/23/2020	7:20	ND	9.19	ND	18.83	NA	NA	
	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/13/2021	8:00	ND	6.14	ND	16.31	NA	NA	
	1/27/2021	7:20	ND	6.38	ND	16.34	NA	NA	
	2/8/2021	7:50	ND	6.32	ND	17.31	NA	NA	
	2/24/2021	7:15	ND	6.16	ND	16.29	NA	NA	
	3/10/2021	9:10	ND	6.24	ND	16.29	NA	NA	
	3/24/2021	8:32	ND	6.36	ND	16.19	NA	NA	
	4/7/2021	7:50	ND	6.10	ND	16.23	NA	NA	
	4/21/2021	8:35	ND	5.82	ND	16.23	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
	9/10/2020	7:45	ND	6.44	ND	13.89	NA	NA	
	9/23/2020	7:25	ND	7.26	ND	13.90	NA	NA	
	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/13/2021	8:05	ND	6.49	ND	13.71	NA	NA	
	1/27/2021	7:25	ND	6.70	ND	13.93	NA	NA	
	2/8/2021	8:00	ND	6.69	ND	13.86	NA	NA	
	2/24/2021	7:20	ND	6.58	ND	13.92	NA	NA	
	3/10/2021	9:15	ND	6.26	ND	13.88	NA	NA	
	3/24/2021	8:41	ND	6.78	ND	13.82	NA	NA	
	4/7/2021	7:55	ND	6.61	ND	13.82	NA	NA	
	4/21/2021	8:40	ND	6.31	ND	13.82	NA	NA	

Table 2
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
	9/10/2020	7:55	ND	7.75	ND	15.63	NA	NA	
	9/23/2020	7:35	ND	8.18	ND	15.69	NA	NA	
	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
	1/13/2021	8:10	ND	7.40	ND	15.70	NA	NA	
	1/27/2021	7:30	ND	7.44	ND	15.62	NA	NA	
	2/8/2021	8:15	ND	7.72	ND	15.63	NA	NA	
	2/24/2021	7:30	ND	7.59	ND	15.59	NA	NA	
	3/10/2021	9:25	ND	7.23	ND	15.54	NA	NA	
	3/24/2021	8:29	ND	7.51	ND	15.53	NA	NA	
	4/7/2021	8:00	ND	7.35	ND	15.58	NA	NA	
	4/21/2021	8:45	ND	7.14	ND	15.59	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	
	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
	9/10/2020	9:20	ND	9.18	ND	26.96	NA	NA	
	9/23/2020	8:30	ND	9.62	ND	26.99	NA	NA	
	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA	
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA	
	2/8/2021	9:35	ND	9.08	ND	27.02	NA	NA	
	2/24/2021	8:40	ND	8.98	ND	26.97	NA	NA	
	3/10/2021	9:50	ND	8.76	ND	27.04	NA	NA	
	3/24/2021	8:53	ND	8.92	ND	27.04	NA	NA	
	4/7/2021	8:05	ND	8.81	ND	27.62	NA	NA	
	4/21/2021	8:50	ND	8.43	ND	27.02	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
	9/10/2020	9:25	ND	9.11	ND	24.53	NA	NA	
	9/23/2020	8:35	ND	9.36	ND	24.68	NA	NA	
	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
	1/13/2021	8:20	ND	9.93	ND	24.72	NA	NA	
	1/27/2021	8:45	ND	8.99	ND	24.66	NA	NA	
	2/8/2021	9:40	ND	9.24	ND	24.71	NA	NA	
	2/24/2021	8:50	ND	9.06	ND	24.56	NA	NA	
	3/10/2021	9:55	ND	8.98	ND	24.68	NA	NA	
	3/24/2021	8:50	ND	8.99	ND	24.62	NA	NA	
	4/7/2021	8:10	ND	8.87	ND	24.54	NA	NA	
	4/21/2021	8:55	ND	8.58	ND	24.61	NA	NA	

Table 2
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3	1/9/2020	8:10	ND	8.32	17.84	20.12	NA	2.28	Pre-pumping measurement ~6 gallons removed
	1/9/2020	8:17	ND	8.45	ND	20.12	NA	NA	Post-pumping measurement
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	12:30	ND	8.36	14.22	20.09	NA	5.87	Pre pumping measurement
	2/21/2020	8:40	ND	8.36	ND	20.09	NA	NA	Post-pumping measurement ~9.5 gallons removed
	3/25/2020	10:15	ND	8.46	13.53	20.13	NA	6.60	Pre-pumping measurement
	3/26/2020	7:40	ND	8.46	ND	20.25	NA	NA	Post-pumping measurement ~8 gallons removed
	4/21/2020	10:42	8.36	8.46	14.46	20.25	0.10	5.79	Pre-pumping measurement
	4/22/2020	9:30	ND	8.68	ND	20.08	NA	NA	Post-pumping measurement ~7.5 gallons removed
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	12:25	ND	8.47	15.06	20.10	NA	5.04	Pre-pumping measurement
	5/21/2020	7:30	ND	10.38	ND	20.12	NA	NA	Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	9:50	ND	8.50	14.15	20.10	NA	5.95	Trace LNAPL film. Pre-pumping measurement
	6/25/2020	8:20	ND	8.50	ND	20.10	NA	NA	Post-pumping measurement ~10 gallons removed
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	10:30	ND	8.43	14.40	20.33	NA	5.93	Pre-pumping measurement
	7/16/2020	9:40	ND	8.43	ND	20.35	NA	NA	Post-pumping measurement ~5 gallons removed
	7/22/2020	10:45	ND	8.49	17.18	20.27	NA	3.09	
	7/26/2020	11:50	ND	8.43	17.05	20.27	NA	3.22	Pre-pumping measurement
	7/27/2020	7:40	ND	8.45	ND	20.27	NA	NA	Post-pumping measurement ~8 gallons removed
	8/6/2020	10:30	ND	7.50	16.95	20.27*	NA	3.32*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	10:46	ND	6.33	15.02	18.27	NA	3.25	Pre-pumping measurement
	8/13/2020	7:50	ND	6.36	ND	18.27	NA	NA	Post-pumping measurement ~4 gallons removed
	8/26/2020	7:45	ND	6.41	16.85	18.91	NA	2.06	Pre-pumping measurement
	8/26/2020	7:50	ND	8.90	ND	18.87	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/10/2020	10:45	ND	7.40	16.30	18.46	NA	2.16	Pre-pumping measurement (Well cut ~2-3' to grade within past two months)
	9/11/2020	7:45	ND	6.45	ND	18.55	NA	NA	Post-pumping measurement ~2.5 -gallons removed
	9/23/2020	9:30	ND	6.37	16.55	18.46	NA	1.91	Pre-pumping measurement
	9/24/2020	7:45	ND	6.45	ND	18.64	NA	NA	Post-pumping measurement ~7.5 -gallons removed
	10/7/2020	11:45	ND	6.30	16.01	18.58	NA	2.57	Pre-pumping measurement
	10/14/2020	8:00	ND	6.20	ND	18.40	NA	NA	Post-pumping measurement ~4 -gallons removed
	10/21/2020	10:10	ND	6.26	15.04	18.63	NA	3.59	Pre-pumping measurement
	10/21/2020	12:45	ND	6.26	ND	18.63	NA	NA	Post-pumping measurement ~5 -gallons removed
	11/4/2020	8:00	ND	6.30	15.55	18.72	NA	3.17	Pre-pumping measurement
	11/5/2020	8:15	ND	6.35	ND	18.74	NA	NA	Post-pumping measurement ~4 -gallons removed
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	7:45	ND	7.41	16.12	18.95	NA	2.83	Pre-pumping measurement
	11/19/2020	8:00	ND	7.43	ND	18.97	NA	NA	Post-pumping measurement ~10 -gallons removed
	12/1/2020	10:30	ND	6.11	15.40	18.69	NA	3.29	Pre-pumping measurement
	12/2/2020	8:35	ND	6.09	ND	18.72	NA	NA	Post-pumping measurement ~30 -gallons removed
	12/16/2020	10:30	ND	6.21	16.25	18.68	NA	2.43	Pre-pumping measurement
	12/18/2020	9:45	ND	6.40	ND	18.62	NA	NA	Post-pumping measurement ~3 -gallons removed
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	8:15	ND	6.19	17.70	18.65	NA	0.95	Pre-pumping measurement
	12/30/2020	8:45	ND	6.17	ND	18.65	NA	NA	Post-pumping measurement ~3 -gallons removed
	1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44	
	1/14/2021	7:40	ND	6.18	15.05	18.65	NA	3.60	Pre-pumping measurement
	1/14/2021	7:50	ND	6.54	ND	18.65	NA	NA	Post-pumping measurement ~5 -gallons removed
	1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33	
	1/28/2021	7:50	ND	6.60	16.40	18.73	NA	2.33	Pre-pumping measurement
	1/28/2021	7:55	ND	6.70	ND	18.73	NA	NA	Post-pumping measurement ~4 -gallons removed
	2/8/2021	10:30	ND	6.35	16.91	18.60	NA	1.69	
	2/11/2021	9:45	ND	6.36	16.95	18.60	NA	1.65	Pre-pumping measurement
	2/11/2021	10:00	ND	6.40	ND	18.60	NA	NA	Post-pumping measurement ~3 -gallons removed
	2/24/2021	10:00	ND	6.30	16.75	18.59	NA	1.84	
	2/25/2021	7:40	ND	6.32	16.75	18.59	NA	1.84	Pre-pumping measurement
	2/25/2021	7:45	ND	6.33	ND	18.60	NA	NA	Post-pumping measurement ~3 -gallons removed
	3/10/2021	11:10	ND	6.26	16.42	18.70	NA	2.28	
	3/11/2021	7:55	ND	6.25	16.22	18.70	NA	2.28	Pre-pumping measurement
	3/11/2021	8:10	ND	6.26	ND	18.71	NA	NA	Post-pumping measurement ~3 gallons removed
	3/24/2021	9:43	ND	6.28	17.55	18.60	NA	1.05	
	3/25/2021	8:20	ND	6.19	17.45	18.61	NA	1.16	Pre-pumping measurement
	3/25/2021	8:30	ND	6.18	ND	18.64	NA	NA	Post-pumping measurement ~4 gallons removed
	4/7/2021	8:15	ND	6.22	17.74	18.69	NA	0.95	
	4/8/2021	6:50	ND	6.21	17.68	18.69	NA	NA	Pre-pumping measurement
	4/8/2021	7:44	ND	6.26	ND	18.65	NA	NA	Post-pumping measurement ~6.5 gallons removed
	4/21/2021	9:00	ND	6.16	17.79	18.64	NA	0.85	
	4/22/2021	7:20	ND	6.18	17.40	18.64	NA	1.24	Pre-pumping measurement
	4/22/2021	7:40	ND	6.21	ND	18.64	NA	NA	Post-pumping measurement ~9 gallons removed

Table 2
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4	1/9/2020	7:50	ND	10.09	15.89	18.16	NA	2.27	Pre-pumping measurement ~10 gallons removed
	1/9/2020	8:04	ND	10.14	ND	17.50	NA	NA	Post-pumping measurement
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	12:30	ND	10.09	15.14	18.10	NA	2.96	Pre-pumping measurement
	2/21/2020	9:00	ND	10.09	18.09	18.10	NA	0.01	Post-pumping measurement ~18.5 gallons removed
	3/25/2020	10:45	ND	10.34	16.40	19.00	NA	2.60	Pre-pumping measurement - Well coupling damaged
	3/26/2020	7:15	ND	10.34	ND	18.06	NA	NA	Post-pumping measurement ~7 gallons removed
	4/21/2020	10:33	ND	10.15	16.35	18.06	NA	1.71	Pre-pumping measurement
	4/22/2020	9:10	ND	10.38	ND	18.48	NA	NA	Post-pumping measurement ~7.5 gallons removed
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	12:10	ND	10.12	17.07	19.18	NA	2.11	Pre-pumping measurement
	5/21/2020	8:15	ND	8.52	ND	19.20	NA	NA	Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	9:40	ND	10.07	16.45	19.20	NA	2.75	Pre-pumping measurement
	6/25/2020	8:10	ND	10.07	ND	19.23	NA	NA	Post-pumping measurement ~10 gallons removed
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	10:05	ND	10.02	16.90	19.60	NA	2.70	Pre-pumping measurement
	7/16/2020	9:15	ND	10.02	ND	19.43	NA	NA	Post-pumping measurement ~5 gallons removed
	7/22/2020	11:00	ND	10.02	18.65	19.41	NA	0.76	
	7/26/2020	12:11	ND	9.87	18.55	19.42	NA	0.87	Pre-pumping measurement
	7/27/2020	7:25	ND	9.88	ND	19.42	NA	NA	Post-pumping measurement ~3 gallons removed
	8/6/2020	10:50	ND	9.58	18.94	19.42*	NA	0.48*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	10:40	ND	7.52	15.26	17.09	NA	1.83	Pre-pumping measurement
	8/13/2020	7:15	ND	7.35	ND	17.09	NA	NA	Post-pumping measurement ~4 gallons removed
	8/26/2020	7:30	ND	6.36	16.71	18.03	NA	1.33	Pre-pumping measurement
	8/26/2020	7:40	ND	8.73	ND	18.07	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/10/2020	11:00	ND	7.42	15.85	17.11	NA	1.26	Pre-pumping measurement (Well cut ~2-3' to grade within past two months)
	9/11/2020	7:30	ND	7.48	ND	17.24	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/23/2020	9:50	ND	7.59	15.95	17.11	NA	1.16	Pre-pumping measurement
	9/24/2020	7:30	ND	7.74	ND	17.30	NA	NA	Post-pumping measurement ~7.5 -gallons removed
	10/7/2020	11:35	ND	7.41	16.21	17.23	NA	1.02	Pre-pumping measurement
	10/14/2020	7:50	ND	7.33	ND	17.33	NA	NA	Post-pumping measurement ~4 gallons removed
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	7:45	ND	7.37	16.07	17.33	NA	1.26	Pre-pumping measurement
	11/5/2020	8:00	ND	7.37	ND	17.35	NA	NA	Post-pumping measurement ~2 gallons removed
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	8:15	ND	7.46	16.27	17.84	NA	1.57	Pre-pumping measurement
	11/19/2020	8:30	ND	7.48	ND	17.87	NA	NA	Post-pumping measurement ~5 gallons removed
	12/1/2020	10:40	ND	7.17	16.65	17.30	NA	0.65	Pre-pumping measurement
	12/2/2020	8:05	ND	7.14	ND	17.32	NA	NA	Post-pumping measurement ~5 gallons removed
	12/16/2020	10:50	ND	7.35	16.75	17.32	NA	0.57	Pre-pumping measurement
	12/18/2020	9:30	ND	7.40	ND	17.35	NA	NA	Post-pumping measurement ~3 gallons removed
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	7:15	ND	7.28	16.29	17.35	NA	1.06	Pre-pumping measurement
	12/30/2020	7:45	ND	7.25	ND	17.36	NA	NA	Post-pumping measurement ~5 gallons removed
	1/13/2021	9:50	ND	7.38	16.34	17.35	NA	1.01	
	1/14/2021	7:15	ND	7.42	16.35	17.35	NA	1.00	Pre-pumping measurement
	1/14/2021	7:35	ND	7.91	ND	17.35	NA	NA	Post-pumping measurement ~5 gallons removed
	1/27/2021	10:40	ND	7.55	16.25	17.45	NA	1.20	
	1/28/2021	7:30	ND	7.60	16.25	17.45	NA	1.20	Pre-pumping measurement
	1/28/2021	7:45	ND	7.78	ND	17.45	NA	NA	Post-pumping measurement ~4 gallons removed
	2/8/2021	10:50	ND	7.48	16.80	17.40	NA	0.60	
	2/11/2021	9:30	ND	7.50	16.80	17.38	NA	0.58	Pre-pumping measurement
	2/11/2021	9:40	ND	7.60	ND	17.40	NA	NA	Post-pumping measurement ~2 gallons removed
	2/24/2021	10:10	ND	7.46	16.68	17.39	NA	0.71	
	2/25/2021	7:50	ND	7.46	16.65	17.39	NA	0.74	Pre-pumping measurement
	2/25/2021	7:55	ND	7.47	ND	17.40	NA	NA	Post-pumping measurement ~2 gallons removed
	3/10/2021	11:20	ND	7.45	17.04	17.40	NA	0.36	
	3/11/2021	7:30	ND	7.49	16.66	17.40	NA	0.74	Pre-pumping measurement
	3/11/2021	7:36	ND	7.55	ND	17.39	NA	NA	Post-pumping measurement ~2 gallons removed
	3/24/2021	9:36	ND	7.48	17.21	17.41	NA	0.20	
	3/25/2021	7:55	ND	7.39	17.18	17.38	NA	0.20	Pre-pumping measurement
	3/25/2021	8:10	ND	7.08	ND	17.39	NA	NA	Post-pumping measurement ~2 gallons removed
	4/7/2021	8:20	ND	7.22	17.30	17.40	NA	0.10	
	4/8/2021	6:45	ND	7.22	17.30	17.40	NA	0.10	Pre-pumping measurement
	4/8/2021	7:29	ND	7.31	ND	17.43	NA	NA	Post-pumping measurement ~1.5 gallons removed
	4/21/2021	9:05	ND	7.14	17.29	17.40	NA	0.11	
	4/22/2021	8:10	ND	7.17	17.11	17.40	NA	0.29	Pre-pumping measurement
	4/22/2021	8:15	ND	7.36	ND	17.39	NA	NA	Post-pumping measurement ~3 gallons removed

Table 2
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	No post-pumping measurement. ~330 gallons of water/DNAPL mixture re
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	
	9/10/2020	9:15	ND	10.02	ND	12.91	NA	NA	
	9/23/2020	8:15	ND	10.38	ND	13.01	NA	NA	
	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/13/2021	10:00	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/27/2021	8:35	ND	7.48	ND	10.70	NA	NA	
	2/8/2021	9:50	ND	7.72	ND	10.57	NA	NA	
	2/24/2021	8:30	ND	7.50	ND	10.56	NA	NA	
	3/10/2021	9:40	ND	7.19	ND	10.55	NA	NA	
	3/24/2021	8:45	ND	7.45	ND	10.46	NA	NA	
	4/7/2021	8:25	ND	4.35	ND	10.49	NA	NA	
	4/21/2021	9:10	ND	4.06	ND	10.51	NA	NA	

Notes:
Pre/post pumping event readings are bolded.
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 3
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
Sep-20	NA	NA	10	10	NA	20	9/11 and 9/24	11/18/2020	Veolia ES
Oct-20	NA	NA	9	4	NA	13	10/14 and 10/21	11/18/2020	Veolia ES
Nov-20	NA	NA	14	7	NA	21	11/5 and 11/19	12/21/2020	Veolia ES
Dec-20	NA	NA	36	13	NA	49	12/2, 12/18, 12/30	*12/21/2020/Pending	Veolia ES
2020 Total	**NA**	**NA**	**149.5**	**121.5**	**NA**	**271**	**1/9/2020 – 12/30/2020**	**2/21/2020 – 2/11/2021**	**Veolia ES**
Jan-21	NA	NA	9	9	NA	18	1/14, 1/28	2/11/2021	Veolia ES
Feb-21	NA	NA	6	4	NA	10	2/11, 2/25	Pending	Veolia ES
Mar-21	NA	NA	7	4	NA	11	3/11, 3/25	Pending	Veolia ES
Apr-21	NA	NA	15.5	4.5	NA	20	3/11, 3/25	Pending	Veolia ES
				TOTAL TO DATE:		**338.5**	gallons		

Notes: *** On February 11, 2021, Veolia ES disposed of 14 gallons of DNAPL generated at NW-3 and NW-4 on December 18 and 30, 2020 and 18 gallons of DNAPL generated at NW-3 and NW-4 on January 14 and 28, 2021. The 10 gallons of DNAPL that were generated at NW-3 and NW-4 on February 11 and 25, 2021, the 11 gallons of DNAPL that were generated at NW-3 and NW-4 on March 11 and 25, 2021, and the 20 gallons of DNAPL that were generated at NW-3 and NW-4 on April 8 and 22, 2021 are currently pending off-site disposal.**

DNAPL - Dense Non-Aqueous Phase Liquid

NA - Not Applicable

APPENDIX A

PERMITS AND APPROVALS

MICHAEL J. SPANO
MAYOR

VINCENT PICI, P.E.
COMMISSIONER

87 Nepperhan Avenue, 5th Floor
Yonkers, New York 10701
Building Tel.: (914) 377 - 6500
Housing Tel.: (914) 377-6527
Fax: (914) 377-6521

DEPARTMENT OF HOUSING AND BUILDINGS

Permit Extension Letter

Owner Information:
Avalon Yonkers Sun Sites LLC
1499 Post Rd
Fairfield, CT 06824

Applicant Information
Avalon Yonkers Sun Sites LLC
1499 Post Rd
Fairfield, CT 06824

Permit #: B201914480
Application #: B0022188
SBL: 2.-2608-29
Zoned: I

Issue Date: 11/18/2019
Expiration Date: 05/16/2021

Location: 80-94 Alexander St

Permit Type: SPRINK-ALT

Work Description:
INSTALL A FIRE SPRINKLER SYSTEM AT MULTIPLE DWELLING PER PLANS FILED.

This is your permit extension. If work is not completed by the expiration date, please contact your inspector to extend the permit as needed. If work is complete please call your inspector for a final inspection.

Vincent Pici, P.E.
Commissioner

MICHAEL J. SPANO
MAYOR

VINCENT PICI, P.E.
COMMISSIONER

87 Nepperhan Avenue, 5th Floor
Yonkers, New York 10701
Building Tel.: (914) 377 - 6500
Housing Tel.: (914) 377-6527
Fax: (914) 377-6521

DEPARTMENT OF HOUSING AND BUILDINGS

Permit Type: ALARM-NEW

APPLICATION NUMBER: B0022302
PERMIT NUMBER: B202000594
ZONE DISTRICT: I

APPLICATION DATE: 10/22/2019
EXPIRATION DATE: 08/18/2021
SECTION, BLOCK & LOT: 2.-2608-29

TENANT NAME:
JOB ADDRESS: **80 Alexander St**
Permission is granted to owner or lessee: Avalon Yonkers Sun Sites LLC

TO: INSTALL A FIRE ALARM SYSTEM IN NEW APARTMENT BUILDING PER PLANS FILED.

***IMPORTANT*, PLEASE READ: UPON RECEIVING LETTER PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR Stanley Kieltyka, or by email at [illegible]@yonkersny.gov.**

NO CONSTRUCTION ACTIVITY CAN OCCUR WITHOUT MEETING THE MINIMUM STATE STANDARDS, AS WELL AS APPLICABLE FEDERAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SUCH MINIMUM STANDARDS OF THE AMERICANS WITH DISABILITIES ACT (ADA), CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), ENVIRONMENTAL PROTECTION AGENCY (EPA), AND UNITED STATES DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE INTERIM GUIDANCE FOR CONSTRUCTION ACTIVITIES DURING THE COVID-19 PUBLIC HEALTH EMERGENCY CAN BE FOUND HTTPS://WWW.GOVERNOR.NY.GOV/SITES/GOVERNOR.NY.GOV/FILES/ATOMS/FILES/CONSTRUCTIONMASTERGUIDANCE.PDF

SECTION 66-4F CODE OF THE CITY OF YONKERS, PROHIBITED NOISES. CONSTRUCTION, REPAIR AND DEMOLITION: OPERATING OR PERMITTING THE OPERATION OF ANY TOOL OR EQUIPMENT USED IN CONSTRUCTION, REPAIR, DEMOLITION OR EXCAVATION BETWEEN THE HOURS OF 6:00 P.M. AND 8:00 A.M. THE FOLLOWING DAY OR AT ANY TIME ON WEEKENDS OR LEGAL HOLIDAYS IS NOT PERMITTED. SUCH OPERATION DOES NOT CONSTITUTE A VIOLATION IF THE TOOL OR EQUIPMENT IS USED IN AN EMERGENCY SITUATION OR IF THE TOOL OR EQUIPMENT IS EQUIPPED WITH A FUNCTIONING MUFFLER OR IF THE OPERATOR IS ISSUED A VARIANCE PURSUANT TO ARTICLE II OF THIS CHAPTER.

IN ACCORDANCE WITH APPROVED PLANS AND AS SPECIFIED IN THE APPLICATION ON FILE AT THE OFFICE OF THE DEPARTMENT OF BUILDINGS AND IN ACCORDANCE WITH ALL APPLICABLE CITY ORDINANCES AND STATE LAWS AFFECTING SUCH CONSTRUCTION.
APPROVED PLANS MUST BE RETAINED ON JOB FOR THE INSPECTOR'S USE.
THIS BUILDING OR ANY PORTION THEREOF FOR WHICH THIS PERMIT SHALL BE ISSUED SHALL NOT BE OCCUPIED UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.

INSPECTION REQUIRED:

A. FRAME INSPECTION
   1. FOOTING AND FOUNDATION INSPECTION TO BE MADE AFTER FOOTING TRENCHES ARE EXCAVATED AND THE NECESSARY FORMS ERECTED.
   2. FRAME & MASONRY INSPECTIONS TO BE MADE PRIOR TO LATCHING OR INSTALLING OF DRYWALL
   3. MECHANICAL INSPECTION TO BE MADE AFTER PIPES, DUCTS & WIRING
   4. FINAL INSPECTION TO BE MADE AFTER IT IS COMPLETED

B. ORDINARY & FIRE RESISTIVE CONSTRUCTION: ALL OF THE ABOVE INSPECTIONS, PLUS INSPECTION AT CRITICAL POINTS, PRIOR TO COVERING UP OF ANY WORK
   1. NO REINFORCING OR STRUCTURE STEEL OF ANY PART OF ANY WALL, BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER, WITHOUT FIRST BEING INSPECTED AND APPROVED BY THE DEPT. OF BUILDINGS.
   2. NO MECHANICAL INSTALLATION IN ANY BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER WITHOUT FIRST BEING INSPECTED & APPROVED BY THE DEPT. OF BUILIDNGS.

THIS PERMIT IS ISSUED PURSUANT TO APPROVAL BY:

	CASE NO.	RES. NO.	DATE
ZONING BOARD OF APPEALS			
PLANNING BOARD			
CITY COUNCIL			
LANDMARKS BOARD			

Vincent Pici, P.E.
Commissioner
Department of Housing and Buildings

POST IN A CONSPICUOUS PLACE

MICHAEL J. SPANO
MAYOR

VINCENT PICI, P.E.
COMMISSIONER

87 Nepperhan Avenue, 5th Floor
Yonkers, New York 10701
Building Tel.: (914) 377 - 6500
Housing Tel.: (914) 377-6527
Fax: (914) 377-6521

DEPARTMENT OF HOUSING AND BUILDINGS

Permit Type: ALARM-NEW

SPECIAL CONDITIONS

***IMPORTANT*, PLEASE READ: UPON RECEIVING LETTER PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR Stanley Kieltyka.**

FAILURE TO RENEW THIS PERMIT PRIOR TO EXPIRATION MAY RESULT IN CANCELLATION OF THE PERMIT. ALL PERMIT EXTENSIONS SHALL BE ASSESSED FROM THE DATE OF EXPIRATION.

PROVIDE PDF OF APPROVED CONSTRUCTION DOCUMENTS TO THIS DEPARTMENT BY E-MAIL TO DHBPlans@yonkersny.gov BEFORE CERTIFICATE OF OCCUPANCY/CERTIFICATE OF COMPLETION CAN BE ISSUED.

Inspectors responsible for compliance of all conditions listed below:

Approval and inspection by J Marchiano, 377-6551.

A copy of approved plans shall remain on-site and be available at time of inspections.

Certificate of Completion required when work is done.

Owner to follow up with Inspector when work is completed.

Architect/Engineer of record shall inspect and certify all work upon completion complies with 2015 IFC/2017 NYS Supplement.

Prior to issuance of Certificate of Completion the following inspections and approvals are required: Fire Department and Building.

Fire alarm wiring rough-in inspection is required and witnessed by Fire Department.

Wiring shall be secured and listed for use with fire alarm systems.

The connection of fire alarm panel or additional panels shall be performed by a Westchester County Licensed Electrical Contractor.

Fire alarm inspection and acceptance test is required and witnessed by Fire Department.

Fire alarm and smoke detection system to be installed in accordance with Building Code of NYS Section 907.

A copy of fire alarm NYS Installer's License is required at the time of final inspection.

Provide a copy of NFPA-72 - record of completion is required at time of final inspection.

Provide a copy of monitoring agreement at time of final inspection.

FIRE DEPARTMENT REVIEW (APPROVED W/COMMENTS) 2/22/2020
1) Ceiling and shelving details are not provided. Review is based on flat ceiling construction. If ceiling pockets are present and require additional detection or notification drawings shall be amended to reflect actual conditions.
2) Connection of fire alarm panel and/or additional panels shall be performed by Westchester county licensed electrical contractor.

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DEPARTMENT OF HOUSING AND BUILDINGS

Permit Type: ALARM-NEW

3) Fire alarm wiring rough in inspection required, witnessed by fire department.
4) Fire alarm final inspection and acceptance test required, witnessed by fire department.
5) Copy of Fire Alarm Installers NYS License required at time of final inspection
6) Copy of NFPA-72 Record of Completion required at time of final inspection.
7) Copy of Monitoring agreement required at time of final inspection
8) Copy of UL Certification of monitoring company required at time of final inspection
9) Scanned copy of submitted and approved fire alarm plans, calculations, manufacturer's cut sheets, documents, etc, containing Yonkers Department of Housing and Buildings Approval stamp, shall be submitted at time of final inspection.

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DEPARTMENT OF HOUSING AND BUILDINGS
Permit Type: ELEV-NEW

APPLICATION NUMBER: EL0000255
PERMIT NUMBER: EL202000013
ZONE DISTRICT: I

APPLICATION DATE: 08/27/2020
EXPIRATION DATE: 09/21/2021
SECTION, BLOCK & LOT: 2.-2608-29

TENANT NAME:
JOB ADDRESS: **80 Alexander St**
Permission is granted to owner or lessee: Avalon Yonkers Sun Sites LLC

TO: INSTALL TWO (2) MRL PASSENGER ELEVATORS SERVING FIVE (5) LANDINGS WITH A CAPACITY OF 3,500 LBS. @ 200 FPM, CITY ELEVATOR #37 & #38.

***IMPORTANT*, PLEASE READ: UPON RECEIVING LETTER PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR Gerald Vanacore, or by email at gerald.vanacore@yonkersny.gov.**

NO CONSTRUCTION ACTIVITY CAN OCCUR WITHOUT MEETING THE MINIMUM STATE STANDARDS, AS WELL AS APPLICABLE FEDERAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SUCH MINIMUM STANDARDS OF THE AMERICANS WITH DISABILITIES ACT (ADA), CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), ENVIRONMENTAL PROTECTION AGENCY (EPA), AND UNITED STATES DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE INTERIM GUIDANCE FOR CONSTRUCTION ACTIVITIES DURING THE COVID-19 PUBLIC HEALTH EMERGENCY CAN BE FOUND HTTPS://WWW.GOVERNOR.NY.GOV/SITES/GOVERNOR.NY.GOV/FILES/ATOMS/FILES/CONSTRUCTIONMASTERGUIDANCE.PDF

SECTION 66-4F CODE OF THE CITY OF YONKERS, PROHIBITED NOISES. CONSTRUCTION, REPAIR AND DEMOLITION: OPERATING OR PERMITTING THE OPERATION OF ANY TOOL OR EQUIPMENT USED IN CONSTRUCTION, REPAIR, DEMOLITION OR EXCAVATION BETWEEN THE HOURS OF 6:00 P.M. AND 8:00 A.M. THE FOLLOWING DAY OR AT ANY TIME ON WEEKENDS OR LEGAL HOLIDAYS IS NOT PERMITTED. SUCH OPERATION DOES NOT CONSTITUTE A VIOLATION IF THE TOOL OR EQUIPMENT IS USED IN AN EMERGENCY SITUATION OR IF THE TOOL OR EQUIPMENT IS EQUIPPED WITH A FUNCTIONING MUFFLER OR IF THE OPERATOR IS ISSUED A VARIANCE PURSUANT TO ARTICLE II OF THIS CHAPTER.

IN ACCORDANCE WITH APPROVED PLANS AND AS SPECIFIED IN THE APPLICATION ON FILE AT THE OFFICE OF THE DEPARTMENT OF BUILDINGS AND IN ACCORDANCE WITH ALL APPLICABLE CITY ORDINANCES AND STATE LAWS AFFECTING SUCH CONSTRUCTION.
APPROVED PLANS MUST BE RETAINED ON JOB FOR THE INSPECTOR'S USE.
THIS BUILDING OR ANY PORTION THEREOF FOR WHICH THIS PERMIT SHALL BE ISSUED SHALL NOT BE OCCUPIED UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.

INSPECTION REQUIRED:

A. FRAME INSPECTION
   1. FOOTING AND FOUNDATION INSPECTION TO BE MADE AFTER FOOTING TRENCHES ARE EXCAVATED AND THE NECESSARY FORMS ERECTED.
   2. FRAME & MASONRY INSPECTIONS TO BE MADE PRIOR TO LATCHING OR INSTALLING OF DRYWALL
   3. MECHANICAL INSPECTION TO BE MADE AFTER PIPES, DUCTS & WIRING
   4. FINAL INSPECTION TO BE MADE AFTER IT IS COMPLETED

B. ORDINARY & FIRE RESISTIVE CONSTRUCTION: ALL OF THE ABOVE INSPECTIONS, PLUS INSPECTION AT CRITICAL POINTS, PRIOR TO COVERING UP OF ANY WORK
   1. NO REINFORCING OR STRUCTURE STEEL OF ANY PART OF ANY WALL, BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER, WITHOUT FIRST BEING INSPECTED AND APPROVED BY THE DEPT. OF BUILDINGS.
   2. NO MECHANICAL INSTALLATION IN ANY BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER WITHOUT FIRST BEING INSPECTED & APPROVED BY THE DEPT. OF BUILIDNGS.

THIS PERMIT IS ISSUED PURSUANT TO APPROVAL BY:

	CASE NO.	RES. NO.	DATE
ZONING BOARD OF APPEALS			
PLANNING BOARD			
CITY COUNCIL			
LANDMARKS BOARD			

Vincent Pici, P.E.
Commissioner
Department of Housing and Buildings

POST IN A CONSPICUOUS PLACE

MICHAEL J. SPANO
MAYOR

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DEPARTMENT OF HOUSING AND BUILDINGS

Permit Type: SPRINK-ALT

APPLICATION NUMBER: B0022244
PERMIT NUMBER: B202000298
ZONE DISTRICT: I

APPLICATION DATE: 10/16/2019
EXPIRATION DATE: 03/31/2021
SECTION, BLOCK & LOT: 2.-2608-29

TENANT NAME:
JOB ADDRESS: **80 Alexander St**
Permission is granted to owner or lessee: Avalon Yonkers Sun Sites LLC

TO: INSTALL A FIRE SPRINKLER SYSTEM AT NEW MULTIPLE DWELLING AND GARAGE PER PLANS FILED.

***IMPORTANT*, PLEASE READ: UPON RECEIVING LETTER PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR Stanley Kieltyka, or by email at stanley.kieltyka@yonkersny.gov.**

SECTION 66-4F CODE OF THE CITY OF YONKERS, PROHIBITED NOISES. CONSTRUCTION, REPAIR AND DEMOLITION: OPERATING OR PERMITTING THE OPERATION OF ANY TOOL OR EQUIPMENT USED IN CONSTRUCTION, REPAIR, DEMOLITION OR EXCAVATION BETWEEN THE HOURS OF 6:00 P.M. AND 8:00 A.M. THE FOLLOWING DAY OR AT ANY TIME ON WEEKENDS OR LEGAL HOLIDAYS IS NOT PERMITTED. SUCH OPERATION DOES NOT CONSTITUTE A VIOLATION IF THE TOOL OR EQUIPMENT IS USED IN AN EMERGENCY SITUATION OR IF THE TOOL OR EQUIPMENT IS EQUIPPED WITH A FUNCTIONING MUFFLER OR IF THE OPERATOR IS ISSUED A VARIANCE PURSUANT TO ARTICLE II OF THIS CHAPTER.

IN ACCORDANCE WITH APPROVED PLANS AND AS SPECIFIED IN THE APPLICATION ON FILE AT THE OFFICE OF THE DEPARTMENT OF BUILDINGS AND IN ACCORDANCE WITH ALL APPLICABLE CITY ORDINANCES AND STATE LAWS AFFECTING SUCH CONSTRUCTION.
APPROVED PLANS MUST BE RETAINED ON JOB FOR THE INSPECTOR'S USE.
THIS BUILDING OR ANY PORTION THEREOF FOR WHICH THIS PERMIT SHALL BE ISSUED SHALL NOT BE OCCUPIED UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.

INSPECTION REQUIRED:

A. FRAME INSPECTION
   1. FOOTING AND FOUNDATION INSPECTION TO BE MADE AFTER FOOTING TRENCHES ARE EXCAVATED AND THE NECESSARY FORMS ERECTED.
   2. FRAME & MASONARY INSPECTIONS TO BE MADE PRIOR TO LATCHING OR INSTALLING OF DRYWALL
   3. MECHANICAL INSPECTION TO BE MADE AFTER PIPES, DUCTS & WIRING
   4. FINAL INSPECTION TO BE MADE AFTER IT IS COMPLETED

B. ORDINARY & FIRE RESISTIVE CONSTRUCTION: ALL OF THE ABOVE INSPECTIONS, PLUS INSPECTION AT CRITICAL POINTS, PRIOR TO COVERING UP OF ANY WORK
   1. NO REINFORCING OR STRUCTURE STEEL OF ANY PART OF ANY WALL, BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER, WITHOUT FIRST BEING INSPECTED AND APPROVED BY THE DEPT. OF BUILDINGS.
   2. NO MECHANICAL INSTALLATION IN ANY BUILDING OR STRUCUTRE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER WITHOUT FIRST BEING INSPECTED & APPROVED BY THE DEPT. OF BUILIDNGS.

THIS PERMIT IS ISSUED PURSUANT TO APPROVAL BY:

	CASE NO.	RES. NO.	DATE
ZONING BOARD OF APPEALS	_____	_____	_____
PLANNING BOARD	_____	_____	_____
CITY COUNCIL	_____	_____	_____
LANDMARKS BOARD	_____	_____	_____

Vincent Pici, P.E.
Commissioner
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DEPARTMENT OF HOUSING AND BUILDINGS

Permit Type: SPRINK-ALT

SPECIAL CONDITIONS

***IMPORTANT*, PLEASE READ: UPON RECEIVING LETTER PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR Stanley Kieltyka.**

FAILURE TO RENEW THIS PERMIT PRIOR TO EXPIRATION MAY RESULT IN CANCELLATION OF THE PERMIT. ALL PERMIT EXTENSIONS SHALL BE ASSESSED FROM THE DATE OF EXPIRATION.

PROVIDE PDF OF APPROVED CONSTRUCTION DOCUMENTS TO THIS DEPARTMENT BY E-MAIL TO DHBPlans@yonkersny.gov BEFORE CERTIFICATE OF OCCUPANCY/CERTIFICATE OF COMPLETION CAN BE ISSUED.

Inspectors responsible for compliance of all conditions listed below:

FIRE DEPARTMENT REVIEW (APPROVED W/COMMENTS) 2/7/20
1) Concealed space sprinkler heads shall be installed as per manufacturer's written recommendations. Where piping is installed more then 6" above the bottom of the wood truss system additional heads shall be required.
2) Standpipe connections shall be 2-1/2" hose outlet angle valves with 8TPI new york corp threads.
3) 200 lb hydrostatic test witnessed by FD required.
4) rough in inspection witnessed by FD required.
5) Final inspection and alarm test witnessed by FD required.
end of FD comments

Approval and inspection by S. Kieltyka, 377-6551.

Sprinkler roughing shall be witnessed by Inspector and Fire Department.

All pipe penetrations through rated walls shall be sealed as required at wall rating.

Engineer of record to inspect and certify all work upon completion complies with 2015 IFC/2017 NYS Supplement.

Certificate of Completion required when work is done. Owner to follow up with Inspector when work is completed.

Prior to issuance of Certificate of Completion the following inspections and approvals are required: Fire Department, Building.

Seismic bracing shall be in accordance with NFPA 13 (2013 Ed.); where applicable.

Sprinkler test prior to occupancy. Fire Department connection to be 2 1/2" New York Corporation Thread.

Sprinklers to be installed in accordance with the New York State Uniform Fire Prevention and Building Code.

Contractor to proceed and place shoring and barricading in a safe manner and according to standard engineering practices.

Final inspection and approval need to be performed by Fire Dept.

Vincent Pici, P.E.
Commissioner
Department of Housing and Buildings

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MICHAEL J. SPANO
MAYOR

VINCENT PICI, P.E., M.P.A.
COMMISSIONER

87 Nepperhan Avenue, 5TH Floor
Yonkers, New York 10701
Building Tel.: 914-377-6500
Housing Tel.: 914-377-6527
Fax: (914) 377-6521

DEPARTMENT OF HOUSING AND BUILDINGS

ELECTRICAL PERMIT

Applicant Information
AERIAL LIGHTING & ELECTRICAL INC.
26 HOTCHKISS STREET
NAUGATUCK, CT 06770

SBL #: 2.-2608-29
Permit #: E202000619
Permit Type: ELEC-C-NEW
Date: 8/18/2020

Owner: Avalon Yonkers Sun Sites LLC
Located At: 80 Alexander St
AKA Address:

Expiration Date: 08/18/2021
Application Date: 06/15/2020
Application #: E0020445

Tenant Name:

All work shall be executed in strict compliance with the permit application, the provisions of the City of Yonkers Building Code and Zoning Ordinance, any and all Ordinances of the Board of Trustees of the City of Yonkers, approved plans, the NYS Uniform Fire Prevention and Building Codes, and all other laws, rules and regulations which apply. The building permit does not constitute authority to build in violation of any federal, state, or local law other rule or regulation.

NO CONSTRUCTION ACTIVITY CAN OCCUR WITHOUT MEETING THE MINIMUM STATE STANDARDS, AS WELL AS APPLICABLE FEDERAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SUCH MINIMUM STANDARDS OF THE AMERICANS WITH DISABILITIES ACT (ADA), CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), ENVIRONMENTAL PROTECTION AGENCY (EPA), AND UNITED STATES DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE INTERIM GUIDANCE FOR CONSTRUCTION ACTIVITIES DURING THE COVID-19 PUBLIC HEALTH EMERGENCY CAN BE FOUND HTTPS://WWW.GOVERNOR.NY.GOV/SITES/GOVERNOR.NY.GOV/FILES/ATOMS/FILES/CONSTRUCTIONMASTERGUIDANCE.PDF

This is to certify that permission is hereby granted for:
INSTALLATION OF THE FEED TO THE NEW FIRE ALARM PANEL

Fee Type	Date	Source	Receipt #	Check Number	Amount
ELECTRICAL PERMIT FLAT	06/16/2020		M5-20-08818	1887563	$175
ELECTRICAL PERMIT	06/16/2020		M5-20-08816	1887563	$10
				Total:	$185.00

Do not proceed beyond these points below until signed and dated by the inspector.
Permission hereby granted to proceed with the work as set forth in the specification, plans or statements now on file in this Department. Any amendments made to the original plans or specifications must be submitted for approval.
Final inspection will not be done until final plumbing and final electrical inspections are done where applicable.

Electrical Division: Nicolas Giglio

THIS PERMIT MUST BE DISPLAYED AT THE JOB SITE

APPENDIX B

INSTITUTIONAL AND ENGINEERING CONTROL CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C360098

Site Name PolyChrome Manufacturing Site

Site Address: 80-94 Alexander Street Zip Code: 10701
City/Town: Yonkers
County: Westchester
Site Acreage: 2.256

Reporting Period: December 31, 2019 to April 30, 2021

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? - TCO in March 2021	☒	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all ICs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. C360098 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
2-2608-29	Avalon Yonkers Sun Sites, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

The institutional controls present at PolyChrome Manufacturing Site (Yonkers Polychrome East BCP C360098 Site or Avalon Building 3) are as follows:

1. Track 4 Restricted Residential, Commercial, and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or residential use, and the engineering controls may not be extinguished without NYSDEC approval and amending or discontinuing the approved 2019 Site Management Plan (SMP) and the 2019 environmental easement.

2. Vegetable gardens and farming on the Site are prohibited

3. All future soil disturbance activities below the 2-foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and the Excavation Work Plan (EWP).

4. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or Westchester County DOH.

5. Groundwater monitoring must be performed as defined in this SMP.

6. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

7. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP.

8. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 30th following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., active SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

2-2608-35	Avalon Yonkers Sun Sites, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

The institutional controls present at PolyChrome Manufacturing Site (Yonkers Polychrome East BCP

C360098 Site or Avalon Building 3) are as follows:

1. Track 4 Restricted Residential, Commercial, and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or residential use, and the engineering controls may not be extinguished without NYSDEC approval and amending or discontinuing the approved 2019 Site Management Plan (SMP) and the 2019 environmental easement.

2. Vegetable gardens and farming on the Site are prohibited.

3. All future soil disturbance activities below the 2-foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and the Excavation Work Plan (EWP).

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8. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 30th following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., active SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

2-2608-37 Avalon Yonkers Sun Sites, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

The institutional controls present at PolyChrome Manufacturing Site (Yonkers Polychrome East BCP C360098 Site or Avalon Building 3) are as follows:

1. Track 4 Restricted Residential, Commercial, and Industrial Uses are allowed. The Controlled property may not be used for a higher use, such as unrestricted or residential use, and the engineering controls may not be extinguished without NYSDEC approval and amending or discontinuing the approved 2019 Site Management Plan (SMP) and the 2019 environmental easement.

2. Vegetable gardens and farming on the Site are prohibited.

3. All future soil disturbance activities below the 2-foot cover, including building renovation/expansion, subgrade utility line repair/relocation, and new construction are conducted in accordance with the approved SMP, and the Excavation Work Plan (EWP).

4. The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for potable or process use, without necessary water quality treatment as determined by the NYSDOH or Westchester County DOH.

5. Groundwater monitoring must be performed as defined in this SMP.

6. An evaluation of the potential for soil vapor intrusion for any buildings developed or reoccupied on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

7. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP.

8. A certification, every year, must be made to the NYSDEC indicating that the requirements of the SMP have been met and denote areas where deficiencies have occurred, if any. A Site Management Report, including any required inspection or sampling documentation and certifications, shall be submitted by the Owner to NYSDEC by April 30th following the calendar reporting years, along with the Certification, signed and certified by the Owner, and certifying that the engineering controls (e.g., active SSDS, site cover) are in place and functioning correctly, or noting any deficiencies and including a corrective action plan for these deficiencies to be corrected. The Owner will also certify that NYSDEC is allowed access to the Site to inspect the engineering controls.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
2-2608-29	
	Vapor Mitigation
	Cover System
	Monitoring Wells

The engineering controls installed at the PolyChrome Manufacturing Site (Yonkers Polychrome East BCP C360098 Site or Avalon Building 3) are as follows:

1. An active vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 2 foot, or NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. NAPL Recovery Well Network as specified in the SMP.

2-2608-35	
	Cover System
	Monitoring Wells
	Vapor Mitigation

The engineering controls installed at the PolyChrome Manufacturing Site (Yonkers Polychrome East BCP C360098 Site or Avalon Building 3) are as follows:

1. An active vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 2 foot, or NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in

Parcel | Engineering Control

walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. NAPL Recovery Well Network as specified in the SMP.

2-2608-37

Vapor Mitigation
Cover System
Monitoring Wells

The engineering controls installed at the PolyChrome Manufacturing Site (Yonkers Polychrome East BCP C360098 Site or Avalon Building 3) are as follows:

1. An active vapor mitigation system will be operated, maintained, monitored as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

2. A site cover system, of at least 2 foot, or NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas will be maintained as required by the approved SMP. Inspections and reporting will be performed in a manner specified in the approved SMP.

3. Any soil underlying within the Controlled Property, must remain covered with a NYSDEC-approved barrier layer consisting of concrete slabs under building structures, concrete or asphalt pavement in walkways and driving surfaces and clean soil cover in vegetated areas on the Controlled Property, which must be inspected, certified and maintained as required in the NYSDEC-approved SMP, and handled as described in the EWP.

4. NAPL Recovery Well Network as specified in the SMP.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. C360098

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Christopher Reynolds (print name) at Avalon Yonkers Sunsites, LLC 1499 Post Road Fairfield, Connecticut 06824 (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date: 5/26/21

EC CERTIFICATIONS

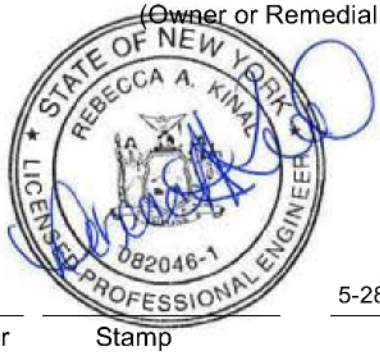
Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Rebecca Kinal (print name) at 34 South Broadway, Suite 300, White Plains, NY 10601 (print business address),

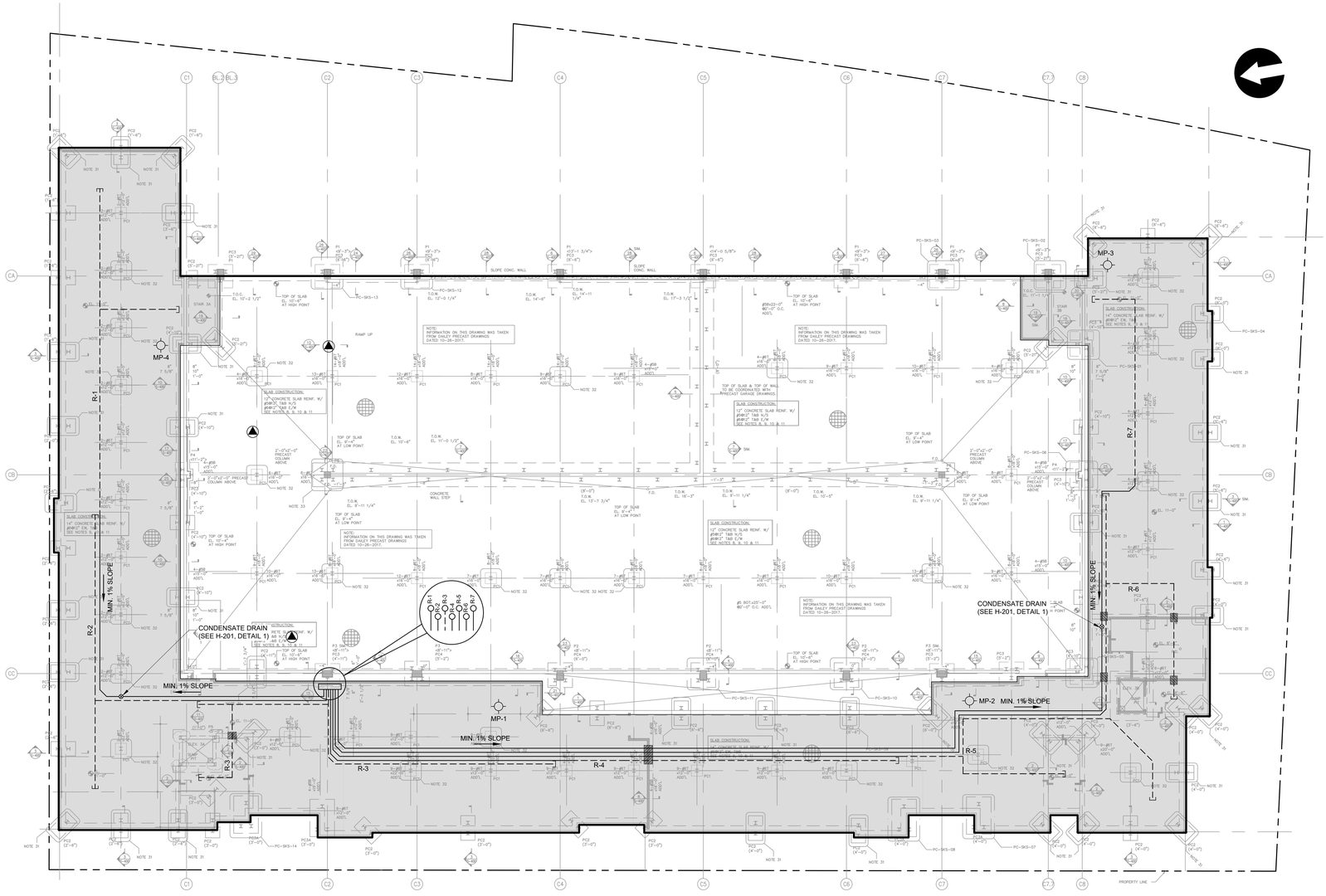
am certifying as a Qualified Environmental Professional for the Avalon Yonkers Sun Sites, LLC (Owner or Remedial Party)



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	5-28-2021 Date

APPENDIX C

VAPOR BARRIER AND SSDS AS-BUILTS



1 H200 SUBSLAB DEPRESSURIZATION SYSTEM LAYOUT

0' 8 16 32
SCALE IN FEET

NOTE: PIPE SPACING NOT TO SCALE

LEGEND

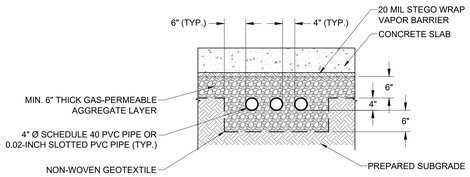
- EXTENT OF VAPOR BARRIER UNDER SLAB
- EXTENT OF GAS PERMEABLE AGGREGATE UNDER SLAB
- PIPE SLEEVE THROUGH GRADE BEAM
- 4" Ø SLOTTED SCHEDULE 40 PVC PIPE WITH PVC END CAP
- 4" Ø SOLID SCHEDULE 40 PVC PIPE
- R-3 — 4" Ø RISER SLAB PENETRATION
- VACUUM MONITORING POINT
- MONITORING WELL

NOTES

1. THIS PLAN SHALL NOT TO BE USED FOR STRUCTURAL, ARCHITECTURAL OR OTHER REFERENCE PURPOSES EXCEPT FOR THE SUB-SLAB DEPRESSURIZATION SYSTEM AND VAPOR BARRIER.
2. HORIZONTAL SUB-SLAB DEPRESSURIZATION SYSTEM PIPE SLOPED A MINIMUM OF 1% UNIFORMLY TOWARDS THE SUB-SLAB DEPRESSURIZATION SYSTEM SLOTTED PIPING OR CONDENSATE DRAIN.
3. BASE MAP FROM PERKINS EASTMAN "BLDG 3 S130 FDN.DWG", S-130 SERIES, 01-02-2019.
4. LOCATIONS ON THIS AS-BUILT ARE APPROXIMATE.
5. GAS PERMEABLE AGGREGATE NOMINAL SIZE OF 1 INCH TO 1/2 INCH AND COMFORM TO ASTM C33 STANDARD SPECIFICATION FOR CONCRETE AGGREGATE SIZE #5 AS PER THE TABLE BELOW:

ASTM #5 AGGREGATE GRADATION
(FOR PIPE TRENCHES)

SIEVE SIZE	PERCENT FINER BY WEIGHT
1.5 inch	100
1 inch	90 to 100
3/4 inch	20 to 55
1/2 inch	0 to 10
3/8 inch	0 to 5



2 H200 TYPICAL PIPING TRENCH
SCALE: N.T.S

MONITORING POINT LOCATIONS		
ID	COLUMN LOCATION	ROOM
MP–1	C4–CC	ELECTRICAL ROOM
MP–2	C7–CC	MECHANICAL ROOM
MP–3	C8–CA	CORRIDOR
MP–4	C1–CA	CORRIDOR

NO.	DATE	
1	02/21/2019	75% SET
2	02/22/2019	75% SET (REVISION 1)
3	03/28/2019	100% CD SET
4	12/12/2019	AS-BUILT
5	05/28/2021	UPDATED AS-BUILT

SEAL

KEY PLAN

Perkins Eastman
422 SUMMER STREET
STAMFORD, CT 06901
T. 203.251.7400
F. 203.251.7474

Owner:
AvalonBay
1499 POST ROAD, SECOND FL
FAIRFIELD, CT 06824

Civil / Site:
PS&S
1 LARKIN PLAZA
2ND FL
YONKERS, NY 10701

Landscape:
Topia
5055 NORTH HARBOR DR, SUITE 200
SAN DIEGO, CA 92106

Structural:
VEITAS & VEITAS ENGINEERS, INC.
639 GRANITE STREET
BRAINTREE, MA 02184

MEP/FP:
R.W. SULLIVAN ENGINEERING
THE SCHRAFFT CENTER
529 MAIN STREET, SUITE 203
BOSTON, MA 02129

ENVIRONMENTAL:
AKRF
THE SCHRAFFT CENTER
34 SOUTH BROADWAY
4TH FLOOR
WHITE PLAINS, NY 10601

PROJECT TITLE:
AVALON YONKERS BUILDING 3

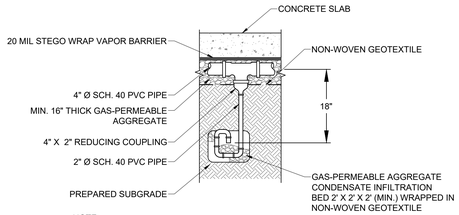
ALEXANDER ST, YONKERS, NY

PROJECT No: 65190.00

DRAWING TITLE:
SSDS AND VAPOR BARRIER PLAN

SCALE: AS NOTED

H-200



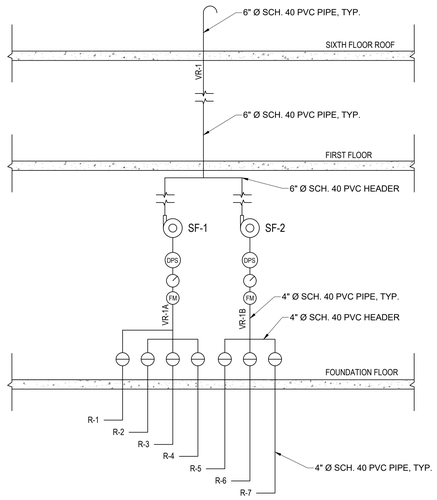
NOTE:

1. INSTALL, AS NECESSARY, AT ALL LOW POINTS IN SUB-SLAB DEPRESSURIZATION SYSTEM PIPING WHEN PIPING CANNOT BE SLOPED TO SLOTTED PIPING.

1 H-201 TYPICAL CONDENSATE DRAIN DETAIL
Not to Scale

LEGEND

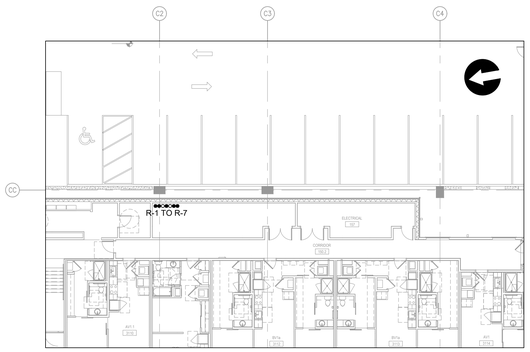
- BLOWER
- DPS — DIFFERENTIAL PRESSURE SWITCH
- MAGNEHELIC GAUGE
- FM — FLOW METER
- CLEANOUT



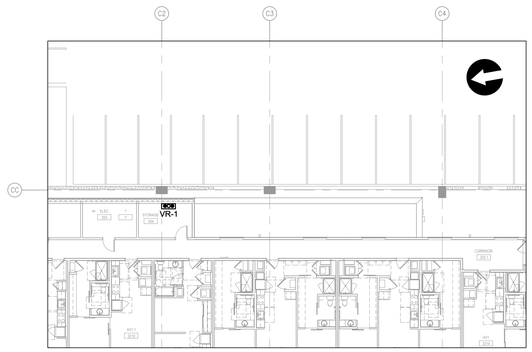
2 H-201 PIPING AND INSTRUMENTATION DIAGRAM
Not to Scale

BLOWER NOTES:

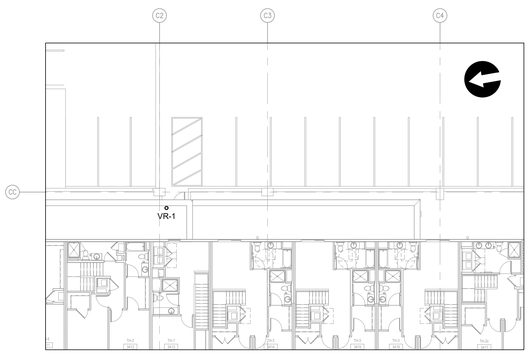
1. BLOWER SIZE REDUCED AS PER CLIENT REQUEST AFTER STARTUP AND QUARTERLY MONITORING RESULTS INDICATE COMPLIANCE WITH THE SMP UTILIZING SMALLER BLOWER (FANTECH RN3).
2. CONTRACTOR TO PROVIDE SPARE BLOWER AND PARTS.
3. SF-1 AND SF-2 ARE SEPARATELY VENTILATED TO THE EXTERIOR COURTYARD BY LOUVER.



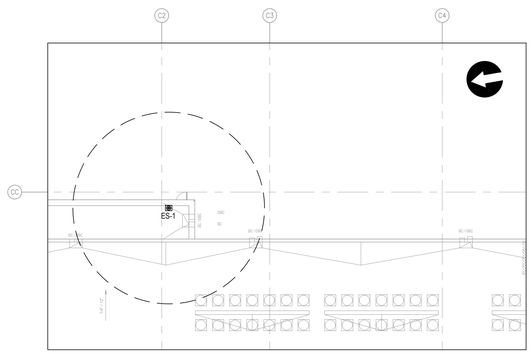
3 H-201 LEVEL 1
0' 8 16 32
SCALE IN FEET



4 H-201 LEVEL 2
0' 8 16 32
SCALE IN FEET



5 H-201 LEVELS 3-5
0' 8 16 32
SCALE IN FEET



6 H-201 ROOF
0' 8 16 32
SCALE IN FEET

LEGEND

- VR-1 — VERTICAL RISER AND IDENTIFICATION NUMBER
- ES-1 — EXHAUST STACK
- 25 FOOT RADIUS FROM EXHAUST STACK

BLOWER SCHEDULE

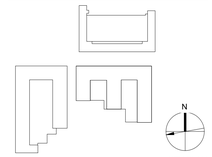
UNIT NO.	AREAS SERVED	SERVICE	LOCATION	SIZE	MAX CFM	MIN. RATE (INCHES WC)	MOTOR REQUIREMENTS			MANUFACTURER/MODEL
SF-1	OCCUPIED SPACES	SSD SYSTEM	ELECTRICAL ROOM	141 W	377	NA	60 HZ	1 PHASE	120 VOLTS	FANTECH RN3
SF-2	OCCUPIED SPACES	SSD SYSTEM	ELECTRICAL ROOM	141 W	377	NA	60 HZ	1 PHASE	120 VOLTS	FANTECH RN3

NOTE:

1. R-1 THROUGH R-7 STUBBED UP THROUGH GROUND FLOOR AND WILL BE ADDRESSED IN 2020, PRIOR TO TEMPORARY OF FULL CERTIFICATE OF OCCUPANCY.

NO.	DATE	
1	02/21/2019	75% SET
2	02/22/2019	75% SET (REVISION 1)
3	03/28/2019	100% CD SET
4	12/12/2019	AS-BUILT
5	05/28/2021	UPDATED AS-BUILT

SEAL



KEY PLAN

Perkins Eastman
422 SUMMER STREET
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F. 203.251.7474

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SAN DIEGO, CA 92106

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639 GRANITE STREET
BRAINTREE, MA 02184

MEP/FP:
R.W. SULLIVAN ENGINEERING
THE SCHRAFFT CENTER
529 MAIN STREET, SUITE 203
BOSTON, MA 02129

ENVIRONMENTAL:
AKRF
THE SCHRAFFT CENTER
34 SOUTH BROADWAY
4TH FLOOR
WHITE PLAINS, NY 10601

PROJECT TITLE:
AVALON YONKERS
BUILDING 3

ALEXANDER ST, YONKERS, NY

PROJECT No: 65190.00

DRAWING TITLE:
SSDS RISER PLAN, DETAILS AND P&ID

SCALE: AS NOTED

H-201

APPENDIX D

SITE-WIDE INSPECTION LOG

SITE MANAGEMENT FORM – SITE-WIDE INSPECTION
POLYCHROME EAST SITE (C360098)
80-94 ALEXANDER STREET, YONKERS, NEW YORK

Inspector: John Sulich

Date: 12/18/2020

1. Site Use Restrictions

No on-site vegetable gardens? Correct

No groundwater withdrawal for potable/non-potable use? Correct.

Restricted residential use maintained? Yes.

2. Site Cap

Note the date that the annual site cap inspection was performed: 12/18/2020

Repairs made as noted during inspection? N/A

3. Soil Management

Note the date(s) of any soil disturbance activities conducted during the past year: N/A

Proper soil management procedures implemented (cite appropriate close-out reports)? N/A

4. Recordkeeping

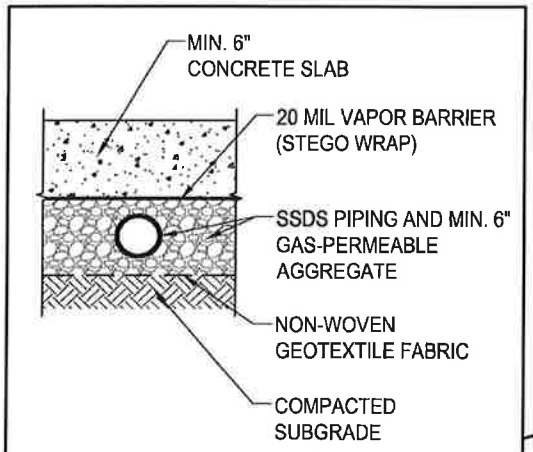
Check that the following records/reports are being maintained/completed (note report/log dates as appropriate):

1) Annual site cap inspection log:
2) Close-out report(s) for soil disturbance activities (including manifests for soil disposal):

5. Comments

Minor surface cracking noted in the parking garage.

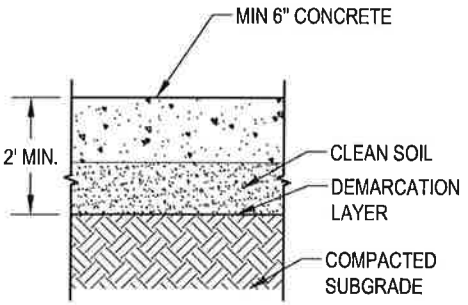
PLE 12/18/20 SITE COVER DWG



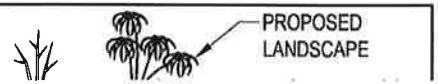
TYPICAL BUILDING SLAB
Not To Scale

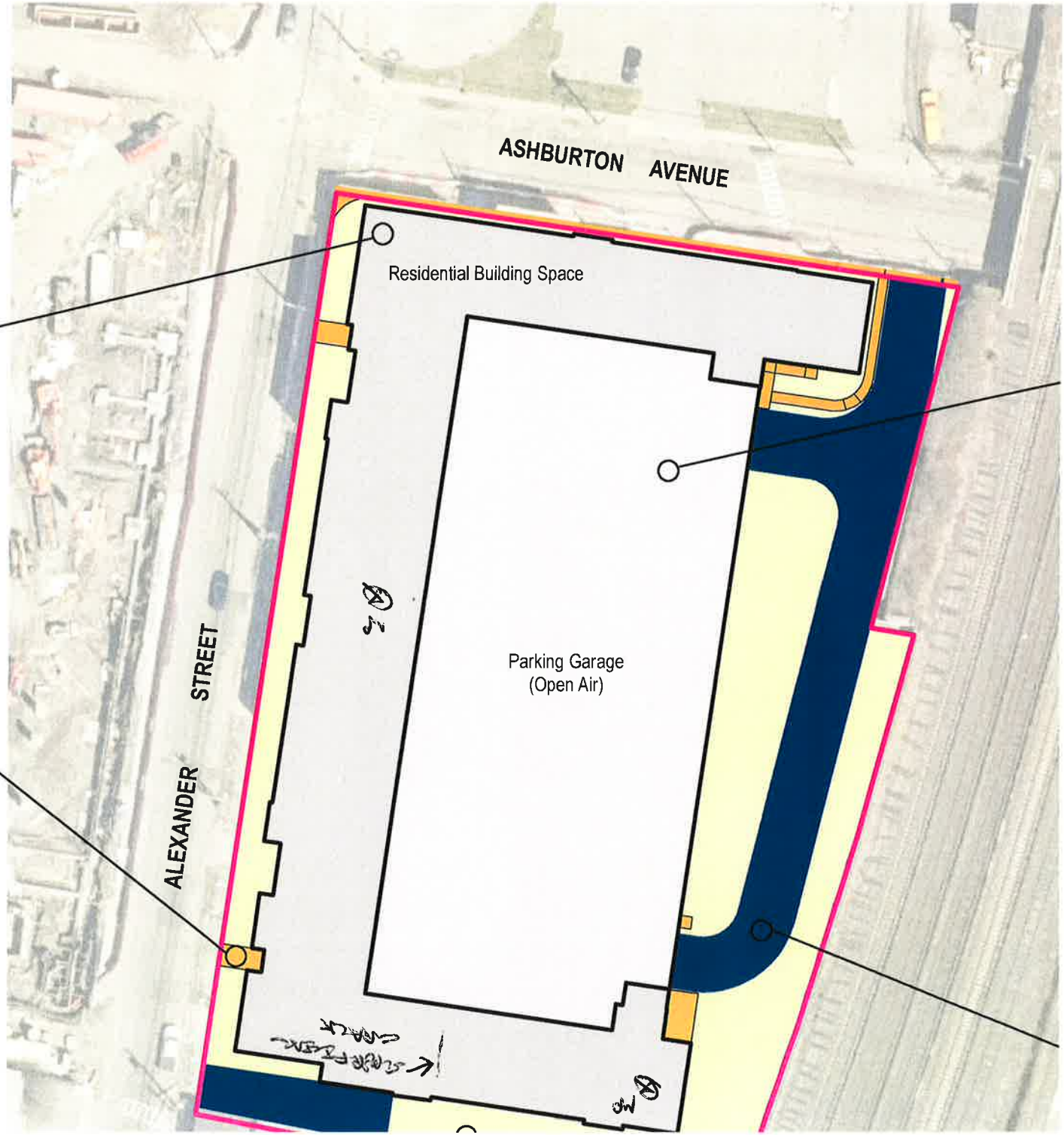
NOTE:

1. SEE APPENDIX E FOR FULL SUB SLAB DEPRESSURIZATION SYSTEM (SSDS) AS-BUILT DRAWINGS.



TYPICAL CONCRETE WALKWAY
Not To Scale





BLD 3 - PGE\Technical\GIS and Graphics\Hazmat\180132 Fig 7b Future Cover System.mxd12/12/2019 12:28:12 PM mveilleux

APPENDIX E
PHOTOGRAPHIC LOG

Photograph 1: Landscaped and asphalt paved areas located on the southeastern portion of the Site, view facing northeast.

Photograph 2: Asphalt paved areas on the southeastern portion of the Site, view facing west.

Photograph 3: The **s**idewalk on western portion of the Site, view facing north.

Photograph 4: Typical garage slab located in the northern portion of the Site, view facing northeast.

Photograph 5: View of surficial cracking on the southern hallway on the first floor hallway.

Photograph 6: The concrete floor slab in the 1st floor hallway on western portion of Site, view facing south.

Photograph 7: View of SSDS risers and gauges.

Photograph 8: Newly installed SSDS monitoring point on the first floor.

APPENDIX F

QUARTERLY SSDS MONITORING REPORTS

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

March 25, 2021

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Startup/Quarterly SSDS Inspection Field Report – March 2021
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the March 2021 sub-slab depressurization system (SSDS) quarterly inspection performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] 80-94 Alexander Street, Yonkers, New York (the Site).

As documented in the Site Management Plan, the SSDS was designed as an Engineering Control (EC) and installed beneath residential portions of the concrete slab of the on-Site building to allow the lateral movement, collection, and venting of potential soil gas vapor from below the building. The major components of the SSDS consists of a subgrade 4-inch, Schedule 40 slotted polyvinyl chloride (PVC) piping network installed within a minimum 6-inch thick layer of gas-permeable aggregate, which is manifolded into two 4-inch Schedule 40 PVC risers, followed by a blower in each riser, then manifolded again into one 6-inch PVC riser, and exhaust stack located on the roof. A differential pressure switch, a flow meter, and a magnehelic gauge are also present on the SSDS to monitor system performance, along with four sub-slab vacuum monitoring points installed throughout the building as documented in the SMP.

SSDS Inspection Results

On March 25, 2021, a quarterly inspection was performed by Mr. Stephen Grens of AKRF. The SSDS inspection included the following:

- Visual inspection of flow sensor to confirm within operating range (40 to 100 cfm);
- Visual inspection of magnehelic gauges to confirm within operating range (0.5 to 10 inches of H2O); and
- Visual inspection of monitoring points to confirm within operating range (a minimum of 0.005 inches of H2O).

Flow rate readings on the SSDS vertical risers and induced sub-slab vacuum readings at the SSDS monitoring points were all within acceptable ranges as per the SMP; however, it should be noted that vacuum and flow rate readings were taken only from the two vertical SSDS risers (VR-1A and VR-1B) and not on each individual leg (i.e., R-1 through R-7). Applied vacuum readings were slightly below the range

specified in the SMP, but the SSDS is functioning as designed as documented by induced vacuum readings across the building footprint well above the minimum required readings in the SMP. An update to the SMP inspection forms is recommended. The results of the inspection were recorded on the SSDS Inspection Forms provided in Attachment A.

Startup of the SSDS system was completed on January 25, 2021, with the induced vacuum at all monitoring points were reported within the SMP acceptable ranges; however, one of the differential pressure switches (DPS) was not functioning appropriately, which affected the SSDS alarm functionality. The faulty DPS was replaced on March 25, 2021 as outlined on the maintenance log enclosed as Attachment B.

Based on the results of the inspection, the SSDS appears to remain effective and protective of human health and the environment. No additional corrective measures are required/recommended at this time.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Attachment A – March 25, 2021 SSDS Inspection Forms
Attachment B – SSDS Maintenance Log

ATTACHMENTS

SITE MANAGEMENT FORM - DETAILED SYSTEM MONITORING INSPECTION FORM
POLYCHROME EAST SITE (C360098)
80-94 Alexander Street, Yonkers, NY

Inspector Name:	**Steve Grens**	**Date:**	**3/25/2021**
Time In:	**13:20**	**Time Out:**	**15:00**

General

Weather: **Overcast**	Temperature: **61° F**	Barometric Pressure: **30.08" Hg**	

When was the last rain event? **3/24/2021**

Is the blower currently operating? Yes / No (circle one) **YES**

If no, please list reason/alarm condition:

Any evidence of system tampering, vandalism or damage in the first floor equipment room? **NO**

Any evidence of system tampering, vandalism, or damage to the exhaust stack? **NO**

Were all cleanout/sampling port caps securely attached prior to system testing? **YES**

If no, list location and contact Project Manager/Project Director.

Is the concrete floor slab overlying all of the SSDS piping runs intact? **YES**

If no, list location and contact Project Manager/Project Director.

SSDS Operations

Sample Identification	Sample Location	Flow Rate[1] cfm	Applied Vacuum[1] in. H_2O	Induced Vacuum[2] in. H_2O	Notes
MP-1	Electrical Room	NA	NA	**0.159**	
MP-2	Mechanical Room	NA	NA	**0.153**	
MP-3	Corridor	NA	NA	**0.102**	
MP-4	Corridor	NA	NA	**0.112**	
R-1	See Appendix E	**73**	**0.3**	NA	**VR-1A Riser (Left)**
R-2	See Appendix E	**98**	**0.4**	NA	**VR-1B Riser (Right)**
R-3	See Appendix E			NA	
R-4	See Appendix E			NA	
R-5	See Appendix E			NA	
R-6	See Appendix E			NA	
R-7	See Appendix E			NA	

Comments: Flow rate and applied vacuum readings taken from vertical risers (VR-1A and VR-1B) as opposed to individual legs (i.e., R-1 through R-7) due to SSDS installation setup.

Notes:

1. Normal system flow rates range from 40 to 100 cfm. Applied vacuum readings range from 0.5 to 10 in. H_2O. System readings will be obtained from each riser leg (R-1 through R-7).
2. Normal system induced vacuum readings should be a minimum of 0.005 in. H_2O. System readings will be obtained from each monitoring point (MP-1 through MP-4).
3. If observations are confirmed to be outside of this range, inform emergency contacts below and prepare corrective action plan, if necessary.

in. of H_2O - inches of water

cfm - cubic feet per minute

NA - not applicable

Emergency Contact Information

Name	Title	Contact Numbers
Patrick McHugh	AKRF - PE/QEP	914-922-2387 (office)
Christopher Capece	Avalon Bay - Site Owner Representative	516-501-6004 (office)
Matthew Hubicki	NYSDEC - Project Manager	518-402-9605 (office)

SITE MANAGEMENT FORM - ROUTINE SYSTEM MONITORING INSPECTION FORM
POLYCHROME EAST SITE (C360098)
80-94 Alexander Street, Yonkers, NY

Inspector Name:	**Steve Grens**	**Date: 3/25/21**
Time In:	**13:20**	**Time Out: 15:00**

General

Is the blower running? yes or no (*circle one*) **YES**
If blower is off, immediately notify an emergency contact.

Are gauges and exterior of SSDS control panel clean? yes or no *(circle one)* - **YES**

Are there any unusual odors, spills or leaks near the system? yes or no (*circle one*) - **NO**
If yes, decribe suspected source and notify emergency contact.

Is air discharging from the exhaust piping to the roof? - **YES**

Are there any problems with the exhaust piping? yes or no (circle one) - **NO**
If yes, describe location of problem and notify emergency contact.

SSDS Operations

Riser Pipe	Flow Rate in Accepted Range? [1,2] (40 to 100 cfm)	Applied Vacuum In Accepted Range? [1,2] (0.5 to 10 in. H_2O)
R-1	■ YES ☐ NO	■ YES ☐ NO
R-2	■ YES ☐ NO	■ YES ☐ NO
R-3	■ YES ☐ NO	■ YES ☐ NO
R-4	■ YES ☐ NO	■ YES ☐ NO
R-5	■ YES ☐ NO	■ YES ☐ NO
R-6	■ YES ☐ NO	■ YES ☐ NO
R-7	■ YES ☐ NO	■ YES ☐ NO

Comments:
Flow rate and applied vacuum readings taken from vertical risers (VR-1A and VR-1B) as opposed to individual legs (i.e., R-1 through R-7) due to SSDS installation setup.

Notes:
1. Normal system flow rates range from 40 to 100 cfm. Applied vacuum readings range from 0.5 to 10 in. H_2O. System readings will be obtained from each riser leg (R-1 through R-7).
2. If readings are outside of the ranges indicated, inform emergency contacts below.

in. of H_2O - inches of water cfm - cubic feet per minute

Emergency Contact Information

Name	Title	Contact Numbers
Patrick McHugh	AKRF - PE/QEP	914-922-2387 (office)
Christopher Capece	Avalon Bay - Site Owner Representative	516-501-6004 (office)
Matthew Hubicki	NYSDEC - Project Manager	518-402-9605 (office)

ATTACHMENT B

ATTACHMENT B - SITE MANAGEMENT FORM - SSDS MAINTENANCE LOG
POLYCHROME EAST SITE (C360098)
80-94 Alexander Street, Yonkers, NY

Date	Time	Location	Reason for maintenance	Error message	Restart successful?	Description of persistant problem(s)	Modification to system?	Photograph or sketch of problem/modification
3/25/2021	13:20	SSDS	Differential Pressure Switch (DPS) Replacement	N/A	N/A	SSDS alarm not functioning due to DPS not engaging alarm function when SSDS powered off.	DPS Replaced	N/A

APPENDIX G

ANNUAL GROUNDWATER SAMPLING LETTER REPORT

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May 28, 2021

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

Re: Annual and Supplemental Groundwater Sampling Letter Report
Polychrome Manufacturing Site (Polychrome East Site)
80-94 Alexander Street, Yonkers, NY 10701
NYSDEC BCP Site: C360098

Dear Mr. Hubicki:

AKRF, Inc. (AKRF), on behalf of Avalon Yonkers Sun Sites, LLC, has prepared this Annual Groundwater Sampling Report (Letter Report) for the Polychrome East Site (the Site) located at 80-94 Alexander Street, Yonkers, New York. This Letter Report summarizes the results of the annual groundwater sampling completed in December 2020, with the additional emerging contaminant sampling completed in February 2021, in accordance with the December 2019 Site Management Plan (SMP) and New York State Department of Environmental Conservation (NYSDEC) correspondence.

BACKGROUND

As detailed in Section 4.4 of the SMP, a network of groundwater monitoring wells was 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 current Site groundwater monitoring well network consists of four 4-inch diameter monitoring wells (identified as MW-A through MW-D), 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 the Site's groundwater monitoring well network. Monitoring well construction details are included in the SMP. The groundwater monitoring network was designed as detailed below.

- MW-A was designed to monitor groundwater quality near the petroleum hot spot observed within the combined Excavation Area B, 3, and 4 along the northern portion of the Site;
- MW-B and MW-C were designed to monitor down-gradient groundwater quality conditions along the western and southern portions of the Site, respectively; and
- MW-D was designed to monitor up-gradient groundwater quality conditions along the eastern portion of the Site.

As part of NYSDEC's statewide initiative to evaluate environmental remediation sites for emerging contaminants, two rounds of emerging contaminant sampling were completed at the Site in 2019. The emerging contaminant samples collected were analyzed for 1,4-dioxane by Environmental Protection Agency (EPA) Method 8270 Selective Ion Monitoring (SIM) and for per- and polyfluoroalkyl substances (PFAS) by EPA Method Modified 537. Sampling for emerging contaminants was not completed during the

December 2020 annual groundwater sampling; however, 1,4-dioxane was reported under the volatile organic compound (VOC) EPA Method 8260, albeit below the requisite reporting limits. In accordance with communication with NYSDEC, supplemental groundwater samples were collected from groundwater monitoring wells MW-1 through MW-D between February 22 and 24, 2021 and analyzed for 1,4-dioxane by EPA Method 8270SIM.

SAMPLING METHODOLOGY

Between December 8 and 9, 2020, groundwater samples were collected from groundwater monitoring wells MW-A through MW-D for analysis of Target Compound List (TCL) VOCs by EPA Method 8260, TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270D, and Target Analyte List (TAL) for metals (total and dissolved). On February 22 and 24, 2021, groundwater samples were collected from groundwater monitoring wells MW-1 through MW-D and analyzed for 1,4-dioxane by EPA Method 8270SIM.

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]. 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. Groundwater observation, turbidity, and water quality parameters are detailed in the well sampling logs provided in Appendix A.

Quality assurance/quality control (QA/QC) samples were collected during the December 2020 annual groundwater sampling event. In December 2020, the QA/QC samples consisted of a blind duplicate sample (labeled MW-X_20201209) collected at groundwater monitoring well MW-A, a matrix spike/matrix spike duplicate collected at groundwater monitoring well MW-D, a field equipment blank, and a trip blank. In February 2021, the QA/QC samples consisted of a blind duplicate sample at MW-D and a field equipment blank.

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.

ANALYTICAL RESULTS

The data collected as part of the baseline sampling event conducted in October 2019 was used to evaluate the appropriate analyte list for the annual sampling event conducted in December 2020, as detailed in the SMP.

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:

- Eight VOCs were detected above the AWQSGVs in one of the four groundwater samples (MW-D) as further detailed below, with naphthalene also reported above the AWQSGVs in MW-A and the associated blind duplicate. All other detected VOCs were below the AWQSGVs.

In-Text Table 1
VOCs in Groundwater Samples Above AWQSGVs

Analyte	Groundwater Sample ID	AWQSGVs (µg/L)	Concentration (µg/L)
1,2,4-Trimethylbenzene	MW-D_20201208	5	12 J
Acetone	MW-D_20201208	50	65
Benzene	MW-D_20201208	1	14
Ethylbenzene	MW-D_20201208	5	17 J
M,P-Xylenes	MW-D_20201208	5	23 J
O-Xylenes	MW-D_20201208	5	13 J
Naphthalene	MW-A_20201209	10	20
	MW-D_20201208		1,400
	MW-X_20201209		17
Toluene	MW-D_20201208	5	17 J
Notes: MW-X_20201209 is a blind duplicate of MW-A_20201209. D: Analyte concentration is from diluted analysis. J: Value is estimated, but the result may be biased low.			

- Thirteen SVOCs were detected above the AWQSGVs in one or more groundwater samples as further detailed below. All other detected SVOCs were below the AWQSGVs.

In-Text Table 2
SVOC Concentrations in Groundwater Samples Above AWQSGVs

Analyte	Groundwater Sample ID	AWQSGVs (µg/L)	Concentration (µg/L)
2,4-Dimethylphenol	MW-D_20201208	50	81
Acenaphthene	MW-D_20201208	20	84
Benzo(a)anthracene	MW-A_20201209	0.002	0.3
	MW-B_20201209		0.04 J
	MW-C_20201208		0.03 J
	MW-D_20201208		2.7
	MW-X_20201209		0.33
Benzo(a)pyrene	MW-A_20201209	ND	0.16 J
	MW-B_20201209		0.03 J
	MW-C_20201208		0.02 J
	MW-D_20201208		1.2 J
	MW-X_20201209		0.31 J
Benzo(b)flouranthene	MW-A_20201209	0.002	0.15 J
	MW-B_20201209		0.03 J
	MW-C_20201208		0.02 J
	MW-D_20201208		1.3 J
	MW-X_20201209		0.3 J

In-Text Table 2 (Continued)
SVOC Concentrations in Groundwater Samples Above AWQSGVs

Analyte	Groundwater Sample ID	AWQSGVs (µg/L)	Concentration (µg/L)
Benzo(k)fluoranthene	MW-A_20201209	0.002	0.05 J
	MW-C_20201208		0.02 J
	MW-D_20201208		0.38 J
	MW-X_20201209		0.11 J
Biphenyl	MW-D_20201209	5	22
Chrysene	MW-A_20201209	0.002	0.21
	MW-B_20201209		0.02 J
	MW-C_20201208		0.01 J
	MW-D_20201208		1.6 J
	MW-X_20201209		0.23
Fluorene	MW-D_20201208	50	68
Indeno(1,2,3,-c,d) pyrene	MW-A_20201209	0.002	0.1 J
	MW-B_20201209		0.02 J
	MW-D_20201208		0.51 J
	MW-X_20201209		0.44
Naphthalene	MW-D_20201208	10	1,100
Phenanthrene	MW-D_20201208	50	120
Phenol	MW-A_20201209	1	6.6
	MW-D_20201208		510 D
	MW-X_20201209		5

Notes:
MW-X_20201209 is a blind duplicate of MW-A_20201209.
D: Analyte concentration is from diluted analysis.
J: Value is estimated, but the result may be biased low.

- Six dissolved metals were detected above the AWQSGVs in one or more groundwater samples as further detailed below. All other detected metals were below the AWQSGVs.

In-Text Table 3
Dissolved Metals in Groundwater Samples Above AWQSGVs

Analyte	Groundwater Sample ID	AWQSGVs (µg/L)	Concentration (µg/L)
Antimony	MW-A_20201209	3	3.42 J
Arsenic	MW-A_20201209	25	37.66
	MW-X_20201209		36.12
Iron	MW-B_20201209	300	852
Mercury	MW-D_20201208	0.7	16.23
Selenium	MW-A_20201209	10	11
	MW-X_20201209		10.9

In-Text Table 3 (Continued)
Dissolved Metals in Groundwater Samples Above AWQSGVs

Analyte	Groundwater Sample ID	AWQSGVs (µg/L)	Concentration (µg/L)
Sodium	MW-A_20201209	20,000	171,000
	MW-B_20201209		190,000
	MW-C_20201208		45,800
	MW-D_20201208		170,000
	MW-X_20201209		167,000
Notes: MW-X_20201209 is a blind duplicate of MW-D_20201209. J: Value is estimated, but the result may be biased low.			

- Similar concentrations were generally reported for the same analytes in the total (unfiltered) samples analyzed. One total lead exceedance (reported at 74.62 µg/L) of the AWQSGV (25 µg/L) was reported from MW-D_20201208.

- 1,4-Dioxane was detected in all four groundwater samples collected in February 2021, as well as the blind duplicate (for MW-D), as further detailed below.

In-Text Table 4 (Continued)
1,4-Dioxane (Emerging Contaminants) in Groundwater Samples

Analyte	Groundwater Sample ID	Concentration (µg/L)
1,4-Dioxane	MW-A_20210224	4.03
	MW-B_20210222	703
	MW-C_20210222	0.205
	MW-D_20210222	228
	MW-X_20210222	225
Notes: MW-X_20210222 is a blind duplicate of MW-D_20210222.		

- The third-party Data Usability Summary Reports (DUSR) generally indicated the data usable, with no substantial data quality issues. Though some qualifiers were added, none significantly altered the analytical results or their interpretation.

Tabulated groundwater results for VOCs, SVOCs, metals (both total and dissolved), and 1,4-dioxane are presented in the attached Tables 1A through 1D. VOCs, SVOCs and metals (dissolved only) exceeding AWQSGVs are displayed on Figure 1. The laboratory analytical reports for groundwater sampling are provided as Attachment B. DUSRs are provided as Attachment C. Validated Electronic Data Deliverables (EDDs) were submitted to NYSDEC on January 21, 2021 and May 18, 2021 (1,4-dioxane data only).

CONCLUSIONS

VOCs and SVOCs

Acetone is a common laboratory contaminant and its reported concentration at MW-D is likely attributable to inadvertent contamination during sample handling at the lab. Acetone was also reported within the method blank QA/QC samples, further indicating potential laboratory contamination.

The VOCs 1,2,4-trimethylbenzene, benzene, ethylbenzene, m,p-xylenes, o-xylene, and toluene were detected at MW-D above their respective AWQSGVs. The reported concentrations were comparable to the concentrations reported in the SMP from the 2019 baseline monitoring event and only were reported in samples collected from monitoring well MW-D. These compounds are commonly associated with petroleum contamination; however, they can also be markers for coal tar contamination. Additionally, the SVOCs fluorene, naphthalene, phenanthrene, and phenol were reported at MW-D above their respective

AWQSGVs and are byproducts commonly associated with coal tar (or coal tar pitch), which was evaluated extensively at the Site and remediated.[1] The highest VOC and SVOC detections were for naphthalene and phenol, and were detected at concentrations one to two orders of magnitude higher than the other VOC and SVOC detections. Therefore, the elevated VOC and SVOC detections are likely attributable to coal tar contamination, and to a lesser extent, from residual on-Site petroleum contamination. It should also be noted that petroleum contaminated soil surrounding the area of MW-D was removed as part of remedial excavation activities, but no VOC exceedances of the 6 NYCRR Part 375 Restricted Residential Soil Cleanup Objectives were reported. Lastly, considering that the location of MW-D is along the eastern Site boundary (at an upgradient monitoring location), the elevated VOC and SVOC groundwater concentrations in MW-D likely originate from an up-gradient (coal tar) source.

With the exception of fluorene, naphthalene, phenanthrene, and phenol, the remaining detected SVOCs in excess of the AWQSGVs are polycyclic aromatic hydrocarbons (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.

Metals

Iron, manganese, and sodium are natural metals that are expected to be present within the aquifer and/or regional groundwater, 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.

Antinomy, arsenic, mercury, and selenium have been previously detected within the urban fill Site-wide and were also detected at similar concentrations in the on-Site groundwater during the 2019 baseline groundwater monitoring event. While remedial activities documented in the FER targeted contaminant source areas of elevated metals (specifically mercury), areas of residual metals contamination within the urban fill remain beneath the Site-wide cover as documented in endpoint sampling in the FER as well as historical sampling events. Additionally, it should be noted that the elevated mercury concentration reported at MW-D may be attributable to off-site sources as MW-D is the Site's up-gradient well.

Lead was also detected above their respective AWQSGVs in one of the four total (unfiltered) groundwater samples; however, lead was 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 sample.

1,4-Dioxane

1,4-Dioxane was detected at all four groundwater monitoring wells (MW-A through MW-D), as well as the blind duplicate in February 2021. The 1,4-dioxane concentrations in February 2021 were comparable to the 2019 baseline results, with modestly higher concentrations detected at MW-B and MW-D and modestly lower concentrations at MW-A and MW-C.

Future Sampling Recommendations

While elevated VOC and SVOC concentrations were reported at MW-D (the Site's upgradient well), the remaining groundwater concentrations are within an order of magnitude of the AWQSGV or are associated with regional groundwater quality (e.g., iron, manganese, and iron). Based on the annual sampling results, AKRF recommends continued groundwater monitoring at MW-A and MW-D on an annual basis in accordance with the SMP for TCL VOCs via EPA 8260 and TCL SVOCs by EPA 8270D. Based on the 1,4-dioxane results, AKRF also recommends continued groundwater monitoring on an annual basis at MW-B and MW-D for 1,4-dioxane by EPA 8270SIM. Future sampling for the remaining wells is not

[1] As documented in the Final Engineering Report (FER), the historical coal tar contamination on-Site originated from the adjacent Consolidated Edison (ConEd) Woodworth Avenue Manufactured Gas Plant (MGP) site.

recommended based upon the baseline and subsequent annual sampling results, which showed only minor low-level detections for VOCs, SVOCs, and 1,4-dioxane. In addition, future groundwater 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.

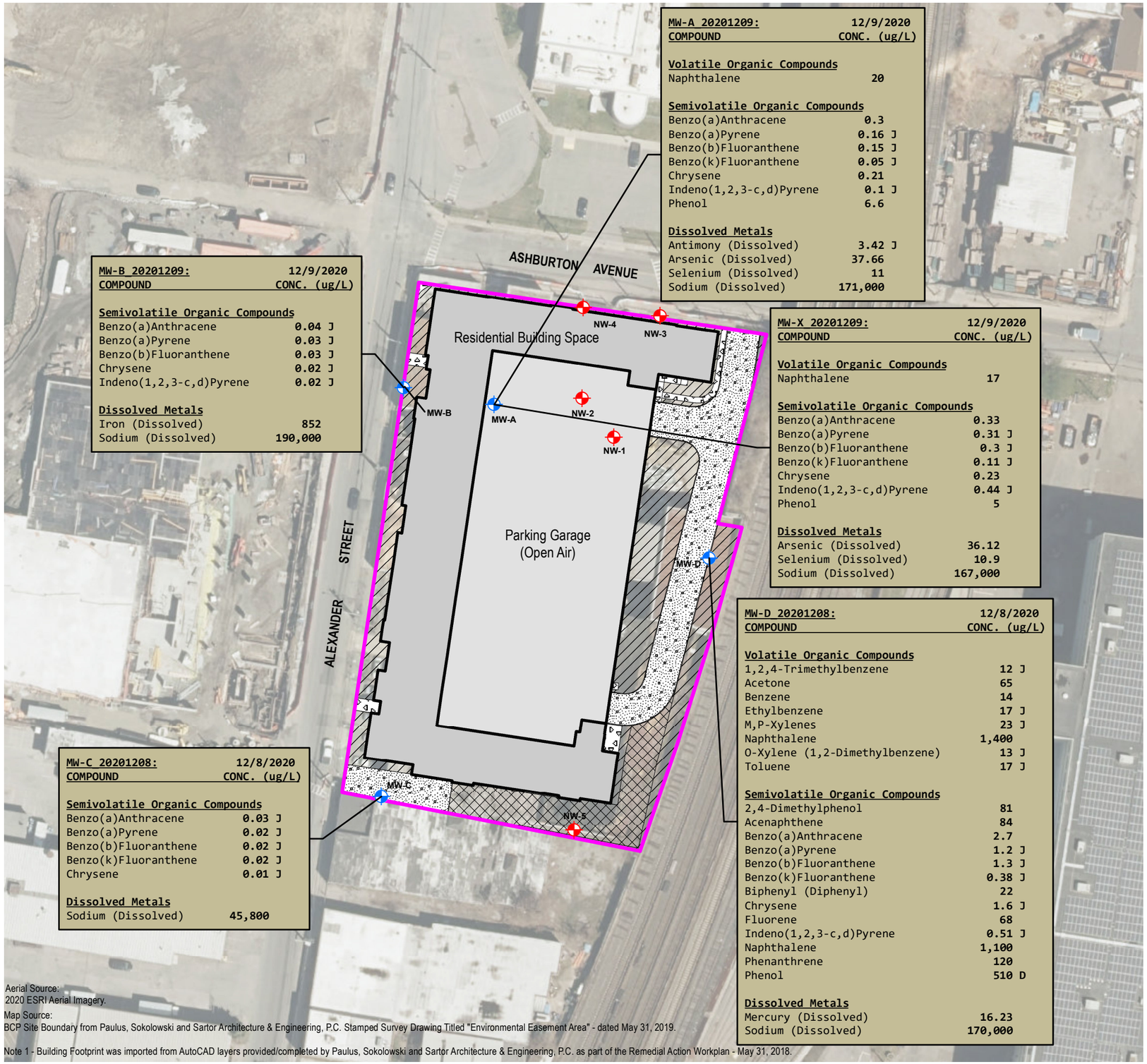
Patrick McHugh, P.E.
Environmental Engineer

Attachments:

Figure 1	Annual Groundwater Sampling Results Exceeding AWQSGVs
Tables 1A-1D	Annual and Supplemental Groundwater Sample Analytical Results
Attachment A	Well Sampling Logs
Attachment B	Laboratory Analytical Reports
Attachment C	Data Usability Summary Reports (DUSRs)

cc (electronic copy only):
S. Deyette, K. Carpenter – NYSDEC
S. Wagh, M. Shuck – NYSDOH
M. Godick, R. Kinal, S. Grens, S. Caporizzo – AKRF
C. Reynolds, J. Vogel – Avalon Yonkers Sun Sites, LLC

FIGURES



MW-A 20201209: 12/9/2020

COMPOUND	CONC. (ug/L)
Volatile Organic Compounds	
Naphthalene	20
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.3
Benzo(a)Pyrene	0.16 J
Benzo(b)Fluoranthene	0.15 J
Benzo(k)Fluoranthene	0.05 J
Chrysene	0.21
Indeno(1,2,3-c,d)Pyrene	0.1 J
Phenol	6.6
Dissolved Metals	
Antimony (Dissolved)	3.42 J
Arsenic (Dissolved)	37.66
Selenium (Dissolved)	11
Sodium (Dissolved)	171,000

MW-B 20201209: 12/9/2020

COMPOUND	CONC. (ug/L)
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.04 J
Benzo(a)Pyrene	0.03 J
Benzo(b)Fluoranthene	0.03 J
Chrysene	0.02 J
Indeno(1,2,3-c,d)Pyrene	0.02 J
Dissolved Metals	
Iron (Dissolved)	852
Sodium (Dissolved)	190,000

MW-X 20201209: 12/9/2020

COMPOUND	CONC. (ug/L)
Volatile Organic Compounds	
Naphthalene	17
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.33
Benzo(a)Pyrene	0.31 J
Benzo(b)Fluoranthene	0.3 J
Benzo(k)Fluoranthene	0.11 J
Chrysene	0.23
Indeno(1,2,3-c,d)Pyrene	0.44 J
Phenol	5
Dissolved Metals	
Arsenic (Dissolved)	36.12
Selenium (Dissolved)	10.9
Sodium (Dissolved)	167,000

MW-C 20201208: 12/8/2020

COMPOUND	CONC. (ug/L)
Semivolatile Organic Compounds	
Benzo(a)Anthracene	0.03 J
Benzo(a)Pyrene	0.02 J
Benzo(b)Fluoranthene	0.02 J
Benzo(k)Fluoranthene	0.02 J
Chrysene	0.01 J
Dissolved Metals	
Sodium (Dissolved)	45,800

MW-D 20201208: 12/8/2020

COMPOUND	CONC. (ug/L)
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	12 J
Acetone	65
Benzene	14
Ethylbenzene	17 J
M,P-Xylenes	23 J
Naphthalene	1,400
O-Xylene (1,2-Dimethylbenzene)	13 J
Toluene	17 J
Semivolatile Organic Compounds	
2,4-Dimethylphenol	81
Acenaphthene	84
Benzo(a)Anthracene	2.7
Benzo(a)Pyrene	1.2 J
Benzo(b)Fluoranthene	1.3 J
Benzo(k)Fluoranthene	0.38 J
Biphenyl (Diphenyl)	22
Chrysene	1.6 J
Fluorene	68
Indeno(1,2,3-c,d)Pyrene	0.51 J
Naphthalene	1,100
Phenanthrene	120
Phenol	510 D
Dissolved Metals	
Mercury (Dissolved)	16.23
Sodium (Dissolved)	170,000

Aerial Source:
2020 ESRI Aerial Imagery.

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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

- BCP SITE BOUNDARY
- RESIDENTIAL BUILDING SPACE
- PARKING GARAGE (OPEN
- SIDEWALK
- GRASS PAVER
- ASPHALT
- LANDSCAPED
- NAPL RECOVERY WELL LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW LNAPL RECOVERY)

	NYSDEC AWQSGVs ug/l
Volatile Organic Compounds	
1,2,4-Trimethylbenzene	5
Acetone	50
Benzene	1
Ethylbenzene	5
O-Xylene (1,2-Dimethylbenzene)	5
Toluene	5
Xylenes, M,P	5
Semivolatile Organic Compounds	
2,4-Dimethylphenol	50
Acenaphthene	20
Benzo(a)Anthracene	0.002
Benzo(a)Pyrene	0
Benzo(b)Fluoranthene	0.002
Benzo(k)Fluoranthene	0.002
Biphenyl (Diphenyl)	5
Chrysene	0.002
Fluorene	50
Indeno(1,2,3-c,d)Pyrene	0.002
Naphthalene	10
Phenanthrene	50
Phenol	1
Metals	
Antimony	3
Arsenic	25
Iron	300
Mercury	0.7
Selenium	10
Sodium	20000

Qualifier	Description
D	Indicates an identified compound in an analysis that has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analyses.
J	The reported value is estimated

0 40 80 160
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

ANNUAL GROUNDWATER MONITORING EXCEEDANCES

DATE
2/12/2021

PROJECT NO.
180132

FIGURE
1

©2021 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\Annual GW Report\180132_Fig 1 GW Well Concentations.mxd 2/12/2021 7:49:41 AM mwelleux

TABLES

Table 1A
Polychrome East
Yonkers, NY
Annual Groundwater Sampling - December 2020
Analytical Results of Volatile Organic Compounds (VOCs)

Client ID	NYSDEC	MW_A_20201209	MW_B_20201209	MW_C_20201208	MW_D_20201208	MW_X_20201209	FIELD BLANK_20201208	TRIP BLANK_20201208
Lab Sample ID	Class GA	L2054986-01	L2054986-02	L2054742-02	L2054742-01	L2054986-03	L2054742-03	L2054742-04
Date Sampled	AWQSGVs	12/9/2020	12/9/2020	12/8/2020	12/8/2020	12/9/2020	12/8/2020	12/8/2020
Dilution		1	1	1	10	1	1	1
Analyte	µg/L							
1,1,1,2-Tetrachloroethane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	25 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	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	15 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	5	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	2.5 UJ	2.5 UJ	2.5 U	25 U	2.5 UJ	2.5 U	2.5 U
1,2,3-Trichloropropane	0.04	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	5	2 U	0.61 J	2 U	20 U	2 U	2 U	2 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	5	0.71 J	2.5 U	2.5 U	**12 J**	0.72 J	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	0.0006	2 U	2 U	2 U	20 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.2 J	0.5 U	0.5 U	5 U	0.21 J	0.5 U	0.5 U
1,2-Dichloroethene, Total	NS	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	10 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropene, Total	0.4	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane	NS	250 U	420 J+	250 R	2,500 R	250 R	250 R	250 R
2,2-Dichloropropane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
2-Butanone	50	5 U	5 U	5 U	50 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	50 U	5 U	5 U	5 U
4-Methyl-2-pentanone	NS	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Acetone	50	9.4 J+	ND U	5 U	**65**	9.3 J+	5 U	5 U
Acrylonitrile	5	5 UJ	5 UJ	5 U	50 U	5 UJ	5 U	5 U
Benzene	1	0.78	0.55	0.5 U	**14**	0.75	0.5 U	0.5 U
Bromobenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Bromochloromethane	5	2.5 U	2.5 UJ	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U	20 U	2 U	2 U	2 U
Bromomethane	5	1.7 J	2.5 UJ	2.5 UJ	25 UJ	0.97 J	2.5 UJ	2.5 UJ
Carbon disulfide	60	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	0.8 J	25 U	2.5 U	2.5 U	2.5 U
Chloromethane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U
Dibromomethane	5	5 U	5 U	5 U	50 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	5 UJ	5 UJ	5 UJ	50 UJ	5 UJ	5 UJ	5 UJ
Ethyl ether	NS	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Ethylbenzene	5	1.7 J	2.5 U	2.5 U	**17 J**	1.7 J	2.5 U	2.5 U
Hexachlorobutadiene	0.5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Isopropylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	10	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Methylene chloride	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Naphthalene	10	**20**	2.3 J	2.5 U	**1,400**	**17**	2.5 U	2.5 U
n-Butylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
n-Propylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
o-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
o-Xylene	5	0.98 J	2.5 U	2.5 U	**13 J**	0.93 J	2.5 U	2.5 U
p/m-Xylene	5	1.6 J	2.5 U	2.5 U	**23 J**	1.6 J	2.5 U	2.5 U
p-Chlorotoluene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
p-Diethylbenzene	NS	2 U	2 U	2 U	20 U	2 U	2 U	2 U
p-Ethyltoluene	NS	0.78 J	2 U	2 U	7.9 J	0.77 J	2 U	2 U
p-Isopropyltoluene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
sec-Butylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
tert-Butylbenzene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Toluene	5	2.5 U	2.5 U	2.5 U	**17 J**	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene	5	2.5 U	2.5 U	2.5 UJ	25 UJ	2.5 U	2.5 UJ	2.5 UJ
Trichloroethene	5	1.8	0.89	0.5 U	5 U	1.8	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	25 U	2.5 U	2.5 U	2.5 U
Vinyl acetate	NS	5 UJ	5 UJ	5 U	50 U	5 UJ	5 U	5 U
Vinyl chloride	2	1 U	0.18 J	1 UJ	10 UJ	1 U	1 UJ	1 UJ
Xylenes, Total	NS	2.6 J	2.5 U	2.5 U	36 J	2.5 J	2.5 U	2.5 U

Table 1B
Polychrome East
Yonkers, NY
Annual Groundwater Sampling - December 2020
Analytical Results of Semivolatile Organic Compounds (SVOCs)

Client ID	NYSDEC	MW_A_20201209	MW_B_20201209	MW_C_20201208	MW_D_20201208	MW_X_20201209	FIELD BLANK_20201208	FIELD BLANK_20201208
Lab Sample ID	Class GA	L2054986-01	L2054986-02	L2054742-02	L2054742-01	L2054986-03	L2054742-03	L2054742-03 R2
Date Sampled	AWQSGVs	12/9/2020	12/9/2020	12/8/2020	12/8/2020	12/9/2020	12/8/2020	12/8/2020
Dilution		1	1	1	1/5/20 †	1	1	1
Analyte	µg/L							
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	NR
1,2,4-Trichlorobenzene	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
1,2-Dichlorobenzene	3	2 U	2 U	2 U	2 U	2 U	2 U	NR
1,3-Dichlorobenzene	3	2 U	2 U	2 U	2 U	2 U	2 U	NR
1,4-Dichlorobenzene	3	2 U	2 U	2 U	2 U	2 U	2 U	NR
2,4,5-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4,6-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4-Dichlorophenol	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,4-Dimethylphenol	50	5 U	5 U	5 U	**81**	5 U	5 U	NR
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U	20 U	NR
2,4-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2,6-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2-Chloronaphthalene	10	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U	0.2 R
2-Chlorophenol	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
2-Methylnaphthalene	NS	0.79	0.1 U	0.1 U	130	0.81	0.04 J	0.1 R
2-Methylphenol	NS	5 UJ	5 U	5 U	53	5 U	5 U	NR
2-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
2-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 UJ	10 U	NR
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 R	5 U	5 U	NR
3-Methylphenol/4-Methylphenol	NS	5 U	5 U	5 U	140	5 U	5 U	NR
3-Nitroaniline	5	5 U	5 U	5 U	5 R	5 U	5 U	NR
4,6-Dinitro-o-cresol	NS	10 U	10 U	10 UJ	10 UJ	10 U	10 UJ	NR
4-Bromophenyl phenyl ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
4-Chloroaniline	5	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	NR
4-Chlorophenyl phenyl ether	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
4-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
4-Nitrophenol	NS	10 U	10 UJ	10 U	10 R	10 UJ	10 U	NR
Acenaphthene	20	1.6	0.09 J	0.16	**84**	1.4	0.1 U	0.1 R
Acenaphthylene	NS	0.8	0.03 J	0.02 J	33	0.81	0.1 U	0.1 R
Acetophenone	NS	5 U	5 U	5 U	3.3 J	5 U	5 U	NR
Anthracene	50	0.92	0.05 J	0.02 J	25	0.86	0.1 U	0.1 R
Benzo(a)anthracene	0.002	**0.3**	**0.04 J**	**0.03 J**	**2.7**	**0.33**	0.1 U	0.1 R
Benzo(a)pyrene	ND	**0.16 J**	**0.03 J**	**0.02 J**	**1.2 J**	**0.31 J**	0.1 U	0.1 R
Benzo(b)fluoranthene	0.002	**0.15 J**	**0.03 J**	**0.02 J**	**1.3 J**	**0.3 J**	0.1 U	0.1 R
Benzo(ghi)perylene	NS	0.09 J	0.02 J	0.1 U	0.48 J	0.5 J	0.1 U	0.1 R
Benzo(k)fluoranthene	0.002	**0.05 J**	0.1 U	**0.02 J**	**0.38 J**	**0.11 J**	0.1 U	0.1 R
Benzoic Acid	NS	8.8 J	50 UJ	50 U	75	50 UJ	50 U	NR
Benzyl Alcohol	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
Biphenyl	5	2 U	2 U	2 U	**22**	2 U	2 U	NR
Bis(2-chloroethoxy)methane	5	5 U	5 U	5 U	5 U	5 U	5 U	NR
Bis(2-chloroethyl)ether	1	2 U	2 U	2 U	2 U	2 U	2 U	NR
Bis(2-chloroisopropyl)ether	5	2 U	2 U	2 U	2 U	2 U	2 U	NR
Bis(2-ethylhexyl)phthalate	5	1.8 J	1.6 J	3 U	3 U	1.7 J	3 U	NR
Butyl benzyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Carbazole	NS	2 U	2 U	2 U	180	2 U	2 U	NR
Chrysene	0.002	**0.21**	**0.02 J**	**0.01 J**	**1.6 J**	**0.23**	0.1 U	0.1 R
Dibenzo(a,h)anthracene	NS	0.02 J	0.1 U	0.1 U	2 U	0.07 J	0.1 U	0.1 R
Dibenzofuran	NS	2 U	2 U	2 U	57	2 U	2 U	NR
Diethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Dimethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Di-n-butylphthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Di-n-octylphthalate	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Fluoranthene	50	0.72	0.07 J	0.04 J	24	0.68	0.1 U	0.1 R
Fluorene	50	0.88	0.03 J	0.03 J	**68**	0.7	0.1 U	0.01 R
Hexachlorobenzene	0.04	0.8 U	0.8 U	0.8 U	16 U	0.8 U	0.8 U	0.8 R
Hexachlorobutadiene	0.5	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 R
Hexachlorocyclopentadiene	5	20 U	20 U	20 U	20 U	20 U	20 U	NR
Hexachloroethane	5	0.8 U	0.8 U	0.8 U	16 U	0.8 U	0.8 U	0.8 R
Indeno(1,2,3-cd)pyrene	0.002	**0.1 J**	**0.02 J**	0.1 U	**0.51 J**	**0.44 J**	0.1 U	0.1 R
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U	NR
Naphthalene	10	2.7	0.1 U	ND U	**1,100**	3.2	0.14	0.1 R
NDPA/DPA	50	2 U	2 U	2 U	2 U	2 U	2 U	NR
Nitrobenzene	0.4	2 U	2 U	2 U	2 U	2 U	2 U	NR
n-Nitrosodi-n-propylamine	NS	5 U	5 U	5 U	5 U	5 U	5 U	NR
p-Chloro-m-cresol	NS	2 U	2 U	2 U	2 U	2 U	2 U	NR
Pentachlorophenol	NS	0.94 J	0.8 UJ	0.74 J	16 U	0.86 J	0.8 U	0.8 R
Phenanthrene	50	0.93	0.05 J	0.04 J	**120**	0.84	0.02 J	0.02 R
Phenol	1	**6.6**	5 U	5 U	**510 D**	**5**	5 U	NR
Pyrene	50	2	0.1 J	0.05 J	19	1.8	0.1 U	0.1 R

Table 1C
Polychrome East
Yonkers, NY
Annual Groundwater Sampling - December 2020
Analytical Results of Total and Dissolved Metals

Client ID	NYSDEC	MW_A_20201209	MW_B_20201209	MW_C_20201208	MW_D_20201208	MW_X_20201209	FIELD BLANK_20201208
Lab Sample ID	Class GA	L2054986-01	L2054986-02	L2054742-02	L2054742-01	L2054986-03	L2054742-03
Date Sampled	AWQSGVs	12/9/2020	12/9/2020	12/8/2020	12/8/2020	12/9/2020	12/8/2020
Dilution		1	1	1	1	1	1
Total Metals	µg/L						
Aluminum, Total	NS	1,440	70.5	82.1	1,620	1,480	10 U
Antimony, Total	3	2.7 J	0.79 J	2.23 J	**4.56**	2.65 J	4 U
Arsenic, Total	25	**32.98**	3.3	1.59	18.82	**34.74**	0.5 U
Barium, Total	1,000	12.19	64.5	80.96	87.14	13.38	0.19 J
Beryllium, Total	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium, Total	5	0.07 J	0.2 U	0.2 U	0.22	0.09 J	0.2 U
Calcium, Total	NS	24,200	65,200	102,000	37,700 J+	24,300	52.9 J
Chromium, Total	50	4.27	1 U	1 U	2.48	4.05	1 U
Cobalt, Total	NS	3.14	0.48 J	0.19 J	0.95	3.34	0.5 U
Copper, Total	200	40.01	3.2	5.68	102.6	41.68	1 U
Iron, Total	300	**790**	**1,670**	**665**	**791 J+**	**995**	50 U
Lead, Total	25	6.73	1.19	3.12	**74.62**	9.48	1 U
Magnesium, Total	35,000	194	17,500	6,570	7,720	240	70 U
Manganese, Total	300	10.94	237.5	81.23	112.4	14.75	1.18
Mercury, Total	0.7	0.2 U	0.2 U	0.2 U	**31.18 J+**	0.2 U	0.2 U
Nickel, Total	100	5.82	0.99 J	1.43 J	38.85	5.78	2 U
Potassium, Total	NS	18,500	38,800	10,900	104,000 J+	18,500	100 U
Selenium, Total	10	**11**	5 U	5 U	5 U	**11.2**	5 U
Silver, Total	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium, Total	20,000	**174,000**	**184,000**	**44,700**	**160,000**	**175,000**	235
Thallium, Total	0.5	1 U	1 U	0.16 J	0.27 J	1 U	1 U
Vanadium, Total	NS	177.7	1.88 J	5 U	2.55 J	177.8	5 U
Zinc, Total	2,000	9.67 J	10 U	24.48	66.7	13.55	10 U

Dissolved Metals	µg/L	1	1	1	1	1	1
Aluminum, Dissolved	NS	1,120	5.37 J	10 U	376	1,100	10 U
Antimony, Dissolved	3	**3.42 J**	1.28 J	1.86 J	2.95 J	2.99 J	4 U
Arsenic, Dissolved	25	**37.66**	3.47	0.86	14.79	**36.12**	0.5 U
Barium, Dissolved	1,000	8.53	54.21	77.92	55.71	8.99	0.5
Beryllium, Dissolved	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium, Dissolved	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Calcium, Dissolved	NS	23,300	67,700	105,000	24,800	22,400	82.5 J
Chromium, Dissolved	50	1.84	0.3 J	1 U	1 U	1.73	1 U
Cobalt, Dissolved	NS	2.9	0.38 J	0.5 U	0.82	2.79	0.5 U
Copper, Dissolved	200	32.03	1.1	2.65	4.04	32.12	1 U
Iron, Dissolved	300	75.7	**852**	87.1	26.6 J	85.1	50 U
Lead, Dissolved	25	1 U	1 U	1 U	0.43 J	1 U	1 U
Magnesium, Dissolved	35,000	25.3 J	18,100	6,620	1,280	30.3 J	70 U
Manganese, Dissolved	300	1 U	237.5	50.53	1 U	1 U	1 U
Mercury, Dissolved	0.7	0.2 U	0.2 U	0.2 U	**16.23**	0.2 U	0.2 U
Nickel, Dissolved	100	5.25	1.13 J	1.25 J	44.45	5.56	2 U
Potassium, Dissolved	NS	17,600	40,300	11,200	120,000	17,100	100 U
Selenium, Dissolved	10	**11**	5 U	5 U	5 UJ	**10.9**	5 U
Silver, Dissolved	50	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Sodium, Dissolved	20,000	**171,000**	**190,000**	**45,800**	**170,000**	**167,000**	431
Thallium, Dissolved	0.5	1 U	1 U	1 U	ND U	1 U	1 U
Vanadium, Dissolved	NS	184.8	1.84 J	5 U	5 U	178.1	5 U
Zinc, Dissolved	2,000	10 U	10 U	19.06	10 U	10 U	10 U

Table 1D
Polychrome East
Yonkers, NY
Supplemental Groundwater Sampling - February 2021
Emerging Contaminants - 1,4-Dioxane

Client ID	NYSDEC	MW_A_20210224	MW_B_20210222	MW_C_20210222	MW_D_20210222	MW_X_20210222	FB_2021022
Lab Sample ID	Class GA	L2109041-01	L21098436-04	L22108436-04	L2108436-01	L2108436-02	L2108436-03
Date Sampled	AWQSGVs	2/24/2021	2/22/2021	2/22/2021	2/22/2021	2/22/2021	2/21/2021
Analyte	µg/L						
1,4-Dioxane (P-Dioxane)	NS	4.03	703	0.205	228	225	0.0314 U

Tables 1A-1C
Polychrome East
Yonkers, NY
Annual Groundwater Sampling - December 2020
Notes

DEFINITIONS

D	:	Analyte concentration is from diluted analysis.
J	:	The concentration given is an estimated value.
J+	:	The result is an estimated quantityu, but the results may be biased high.
ND	:	The standard is a non-detectable concentration by the approved analytical method.
NR	:	Not reported.
NS	:	No standard.
R	:	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyted may or may not be present in the sample.
U	:	The analyte was not detected at the indicated concentration.
UJ	:	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be innacurate or imprecise.
†	:	Dilution factor varies.
µg/L	:	micrograms per liter

STANDARDS

NYSDEC Class GA AWQSGVs	:	New York State Department of Environmental Conservation (NYSDEC) 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
WELL SAMPLING LOGS

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**T. Giordano**		
Date:	**12/9/2020**	**Sampling Time:**	**9:40 AM**	**MW-A**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	15.80 ft. below top of casing	**Water Column (WC):**	6.24 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	9.56 ft. below top of casing	**Well Volume*:**	4.07 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	1.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:00	9.56	100	13.44	1.04	5.40	10.53	15	0	MW-A_20201209 MW-X_20201209
9:05	9.56	100	13.19	1.04	2.64	11.01	-11	0	
9:10	9.56	100	13.25	1.05	2.37	11.05	-19	0	
9:15	9.56	100	13.24	1.06	1.79	11.11	-49	0	
9:20	9.56	100	13.12	1.06	1.58	11.12	-52	0	
9:25	9.56	100	13.37	1.08	1.38	11.11	-58	0	
9:30	9.56	100	13.45	1.1	1.21	11.1	-61	0	
9:35	9.56	100	13.51	1.2	1.13	11.11	-66	0	
9:40	SAMPLE								
9:45	9.56	100	13.56		1.01	11.12	-71	0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW-A_20201209 was analyzed for VOCs, SVOCs and Metals (Total & Dissolved).

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**J. Sulich**		
Date:	**2/24/2021**	**Sampling Time:**	**1:55 PM**	**MW-A**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	15.50 ft. below top of casing	**Water Column (WC):**	6.03 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	9.47 ft. below top of casing	**Well Volume*:**	3.94 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12.00 ft. below top of casing				

Time	**Depth to Water** (Ft.)	**Purge Rate** (ml/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
13.10	9.47	100	13.03	0.769	19.28	6.84	120	11.3	
13.15	9.47	100	12.85	0.764	11.67	6.87	109	9.5	
13:20	9.47	100	12.86	0.77	10.76	6.96	90	13.2	
13:25	9.47	100	12.79	0.775	10.51	7.03	78	10.49	
13:30	9.47	100	12.76	0.776	10.44	7.1	75	14.6	
13:35	9.47	100	12.73	0.779	10.23	7.25	65	14.3	MW-A_20210224
13:40	9.47	100	12.7	0.778	10.06	7.18	54	10.07	
13:45	9.47	100	12.56	0.772	9.96	7.21	52	9.95	
13:50	9.47	100	12.6	0.778	9.82	11.37	46	14.9	
13:55	SAMPLE								
14:20	9.47	100	12.62	0.778	9.84	7.22	49	16.2	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW_A_2021024 was analyzed for 1,4-dioxane.

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**T. Giordano**		
Date:	**12/9/2020**	**Sampling Time:**	**11:00 AM**	**MW-B**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	16.70 ft. below top of casing	**Water Column (WC):**	10.77 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	5.93 ft. below top of casing	**Well Volume*:**	7.03 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	1.75 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
10:15	5.93	100	12.02	1.39	5.29	9.42	52	0	
10:20	5.93	100	12.73	1.39	1.76	8.73	48	0	
10:25	5.93	100	12.32	1.07	1.41	8.11	35	0	
10:30	5.93	100	12.19	1.4	0.62	7.66	-128	0	
10:35	5.93	100	12.23	1.4	0.59	7.63	-139	0	
10:40	5.93	100	12.13	1.41	0.54	7.56	-153	0	MW-B_20201209
10:45	5.93	100	11.99	1.42	0.53	7.53	-159	0	
10:50	5.93	100	11.73	1.41	0.6	7.49	-163	0	
10:55	5.93	100	11.79	1.41	0.5	7.48	-164		
11:00	SAMPLE								
11:05	5.93	100	11.65	1.42	0.56	7.46	-164	0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW-B_20201209 was analyzed for VOCs, SVOCs and Metals (Total & Dissolved).

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**J. Sulich**		
Date:	**2/22/2021**	**Sampling Time:**	**11:40 AM**	**MW-B**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	16.00 ft. below top of casing	**Water Column (WC):**	9.88 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	6.12 ft. below top of casing	**Well Volume*:**	6.45 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12.00 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:05	6.12	100	12.09	1.46	8.29	6.13	5	14.1	
11:10	6.12	100	12.92	1.3	8.54	6.19	-20	12.2	
11:15	6.12	100	13.34	1.21	9.01	6.26	-49	10.3	
11:20	6.12	100	13.36	1.21	9.02	6.29	-52	9.7	
11:25	6.12	100	13.39	1.21.19	9.03	6.32	-63	8	MW_B_20210222
11:30	6.12	100	13.4	1.18	9.01	6.35	-64	9.2	
11:35	6.12	100	13.41	1.78	8.87	6.37	-69	10	
11:40	SAMPLE								
13:55	6.12	100	14.86	1.11	0.37	6.37	-69	8.2	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW_B_2021022 was analyzed for 1,4-dioxane.

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**T. Giordano**		
Date:	**12/8/2020**	**Sampling Time:**	**15:00:00 PM**	**MW-C**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	13.98 ft. below top of casing	**Water Column (WC):**	7.64 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	6.34 ft. below top of casing	**Well Volume*:**	4.99 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	10.00 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
14:30	6.34	100	12.49	0.794	3.95	9.02	7	0	MW-C_20201208
14:35	6.34	100	12.95	0.791	2.87	8.11	24	0	
14:40	6.34	100	13.15	0.788	2.07	7.26	52	0	
14:45	6.34	100	13.29	0.789	1.92	7.06	49	0	
14:50	6.34	100	13.58	0.791	1.76	7.01	46	0	
14:55	6.34	100	13.48	0.793	1.78	6.98	43	0	
15:00	SAMPLE								
15:05	6.34	100	13.63	0.797	1.54	6.76	40	0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW-C_20201208 was analyzed for VOCs, SVOCs and Metals (Total & Dissolved).

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**J. Sulich**		
Date:	**2/22/2021**	**Sampling Time:**	**10:35 AM**	**MW-C**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	13.51 ft. below top of casing	**Water Column (WC):**	7.01 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	6.50 ft. below top of casing	**Well Volume*:**	4.58 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12.00 ft. below top of casing				

Time	**Depth to Water** (Ft.)	**Purge Rate** (ml/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
9:45	6.50	100	11.15	3.81	9.53	6.97	-151	250	MW_C_20210222
9:50	6.50	100	11.48	4.31	9.62	6.71	-140	202	
9:55	6.50	100	11.48	4.31	9.88	6.40	-65	156	
10:00	6.50	100	1.45	4.38	9.89	6.43	-35	114	
10:05	6.50	100	11.48	4.42	9.86	6.44	-28	101	
10:10	6.50	100	11.52	4.43	9.76	6.46	-7	74.5	
10:15	6.50	100	11.5	4.42	9.7	6.46	-1	61.7	
10:20	6.50	100	11.48	4.41	9.6	6.45	8	55.2	
10:35	6.50	100	11.49	4.4	9.5	6.45	12	51.7	
10:30	6.50	100	11.59	4.39	9.41	6.45	16	44.8	
13:25	SAMPLE								
13:55	7.04	100	11.58	4.4	9.42	6.45	18	43	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW_C_2021022 was analyzed for 1,4-dioxane.

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**T. Giordano**		
Date:	**12/8/2020**	**Sampling Time:**	**13:25:00 PM**		**MW-D**
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	15.89 ft. below top of casing	**Water Column (WC):**	8.85 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	7.04 ft. below top of casing	**Well Volume*:**	5.78 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	11.00 ft. below top of casing				

Time	Depth to Water (Ft.)	Purge Rate (ml/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
12:40	7.04	100	15.83	2.03	7.34	11.47	-179	0	MW-D_20201208 MW-D_MS/MSD_20201208
12:45	7.04	100	15.73	2	4.26	11.56	-217	0	
12:50	7.04	100	15.57	1.97	3.70	11.56	-233	0	
12:55	7.04	100	15.51	1.9	3.27	11.54	-238	0	
13:00	7.04	100	15.36	1.87	3.16	11.52	-241	0	
13:05	7.04	100	15.36	1.81	2.86	11.47	-242	0	
13:10	7.04	100	15.25	1.78	2.65	11.45	-243	0	
13:15	7.04	100	15.21	1.71	2.59	11.4	-240	0	
13:20	7.04	100	15.2	1.67	2.48	11.37	-239	0	
13:25	SAMPLE								
13:30	SAMPLE MS/MSD								
13:55	7.04	100	14.86	1.28	0.49	10.84	-237	34.1	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW-D_20201208 was analyzed for VOCs, SVOCs and Metals (Total & Dissolved).

Well Sampling Log

Job No:	**180132**	**Client:**	**Avalon Bay Sun Sites, LLC**	**Well No:**	
Project Location:	**AVB Yonkers Polychrome East**	**Sampled By:**	**J. Sulich**		
Date:	**2/22/2021**	**Sampling Time:**	**9:15 AM**	**MW-D**	
LEL at surface:	**N/A**				
PID at surface:	**ND**				
Total Depth:	15.54 ft. below top of casing	**Water Column (WC):**	8.01 feet	*= 0.163 * WC for 2" wells	
Depth to Water:	7.53 ft. below top of casing	**Well Volume*:**	5.23 gallons	*= 0.653 * WC for 4" wells	
Depth to Product:	ND ft. below top of casing	**Volume Purged:**	2.5 gallons	*= 1.469 * WC for 6" wells	
Depth to top of screen:	ft. below top of casing	**Well Diam.:**	4 inches	Target Maximum Flow Rate is 100 ml/min	
Depth to bottom of screen:	ft. below top of casing	**Purging Device (pump type):**	Peristaltic Pump		
Approx. Pump Intake:	12.00 ft. below top of casing				

Time	**Depth to Water** (Ft.)	**Purge Rate** (ml/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
8:20	7.53	100	12.51	2.11	50.00	7.19	-50	29	
8:25	7.53	100	12.64	2.08	18.19	6.62	-88	28.6	
8:30	7.53	100	12.95	2.02	15.9211.18	6.50	-99	30.1	
8:35	7.53	100	13.05	1.98	11	6.32	-184	32	
8:40	7.53	100	13.17	1.89	10.75	6.29	-219	35.8	
8:45	7.53	100	13.17	1.73	10.68	6.3	-231	38.7	
8:50	7.53	100	13.09	1.73	10.53	6.32	-252	45	MW_D_20210222
8:55	7.53	100	12.6	1.61	10.61	6.43	-265	48.7	
9:00	7.53	100	12.47	1.57	10.59	6.47	-272	59.8	
9:05	7.53	100	12.27	1.56	10.62	6.43	-275	50.3	
9:10	7.53	100	12.2	1.56	10.62	6.44	-277	49.8	
13:25	SAMPLE								
13:55	7.53	100	12.31	1.57	10.69	6.44	-280	48,2	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater Sample MW_D_2021022 was analyzed for 1,4-dioxane.

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L2054742
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVALON BAY SUN SITES-PCE
Project Number:	180132
Report Date:	12/18/20

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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: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054742
Report Date: 12/18/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2054742-01	MW_D_20201208	WATER	YONKERS, NY	12/08/20 13:25	12/08/20
L2054742-02	MW_C_20201208	WATER	YONKERS, NY	12/08/20 15:00	12/08/20
L2054742-03	FIELD BLANK_20201208	FIELD BLANK	YONKERS, NY	12/08/20 15:30	12/08/20
L2054742-04	TRIP BLANK_20201208	TRIP BLANK (AQUEOUS)	YONKERS, NY	12/08/20 00:00	12/08/20

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

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 BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

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 WG1444581-4 MS/MSD recovery, performed on L2054742-01, is below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%), 3-nitroaniline (0%/0%), 4-nitrophenol (0%/0%), and carbazole (MSD 0%) due to the concentrations of these compounds in the MS/MSD falling below the reported detection limits.

Semivolatile Organics by SIM

L2054742-01: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L2054742-03: The Field Blank has a concentration above the reporting limit for Naphthalene. The field blank was re-extracted with the method required holding time exceeded and was non-detect for this target compound. The results of both extractions are reported.

WG1444582: A Matrix Spike and a Matrix Spike Duplicate were not analyzed because the dilution required by the elevated concentrations of non-target compounds present in the native sample would have caused the spike compounds to be diluted below the range of calibration.

Total Metals

L2054742-03: The Field Blank has results for manganese and sodium present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1445287-3/-4 MS/MSD recoveries, performed on L2054742-01, are outside the acceptance criteria for calcium (159%/154%) and iron (MS 127%). A post digestion spike was performed and was within

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

Case Narrative (continued)

acceptance criteria.

The WG1445287-3/-4 MS/MSD recoveries for potassium (250%/250%) and sodium (220%/220%), performed on L2054742-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1445290-3/-4 MS/MSD recoveries for mercury (287%/288%), performed on L2054742-01, do not apply because the sample concentration is greater than four times the spike amount added.

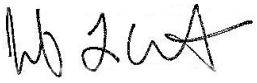
Dissolved Metals

L2054742-03: The Field Blank has results for barium and sodium present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1445333-3/-4 MS/MSD recoveries for potassium (MS 140%) and sodium (350%/40%), performed on L2054742-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1445333-3/-4 MS/MSD recoveries, performed on L2054742-01, are outside the acceptance criteria for selenium (62%/54%). A post digestion spike was performed and was within acceptance criteria.

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:  Jennifer L Clements

Title: Technical Director/Representative Date: 12/18/20

ORGANICS

VOLATILES

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D
Client ID: MW_D_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 13:25
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/11/20 21:30
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
1,3-Dichloropropene, Total	ND		ug/l	5.0	1.4	10
1,1-Dichloropropene	ND		ug/l	25	7.0	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	14		ug/l	5.0	1.6	10
Toluene	17	J	ug/l	25	7.0	10
Ethylbenzene	17	J	ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D Date Collected: 12/08/20 13:25
Client ID: MW_D_20201208 Date Received: 12/08/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	23	J	ug/l	25	7.0	10
o-Xylene	13	J	ug/l	25	7.0	10
Xylenes, Total	36	J	ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
1,2-Dichloroethene, Total	ND		ug/l	25	7.0	10
Dibromomethane	ND		ug/l	50	10.	10
1,2,3-Trichloropropane	ND		ug/l	25	7.0	10
Acrylonitrile	ND		ug/l	50	15.	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	65		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
Vinyl acetate	ND		ug/l	50	10.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
2,2-Dichloropropane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,3-Dichloropropane	ND		ug/l	25	7.0	10
1,1,1,2-Tetrachloroethane	ND		ug/l	25	7.0	10
Bromobenzene	ND		ug/l	25	7.0	10
n-Butylbenzene	ND		ug/l	25	7.0	10
sec-Butylbenzene	ND		ug/l	25	7.0	10
tert-Butylbenzene	ND		ug/l	25	7.0	10
o-Chlorotoluene	ND		ug/l	25	7.0	10
p-Chlorotoluene	ND		ug/l	25	7.0	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Hexachlorobutadiene	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
p-Isopropyltoluene	ND		ug/l	25	7.0	10
Naphthalene	1400		ug/l	25	7.0	10

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D Date Collected: 12/08/20 13:25
Client ID: MW_D_20201208 Date Received: 12/08/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
1,3,5-Trimethylbenzene	ND		ug/l	25	7.0	10
1,2,4-Trimethylbenzene	12	J	ug/l	25	7.0	10
1,4-Dioxane	ND		ug/l	2500	610	10
p-Diethylbenzene	ND		ug/l	20	7.0	10
p-Ethyltoluene	7.9	J	ug/l	20	7.0	10
1,2,4,5-Tetramethylbenzene	ND		ug/l	20	5.4	10
Ethyl ether	ND		ug/l	25	7.0	10
trans-1,4-Dichloro-2-butene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	92		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00
Client ID: MW_C_20201208 Date Received: 12/08/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/11/20 21:03
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	0.80	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30
Client ID: FIELD BLANK_20201208 Date Received: 12/08/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8260C
Analytical Date: 12/11/20 20:37
Analyst: MKS

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-04
Client ID: TRIP BLANK_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 00:00
Date Received: 12/08/20
Field Prep: Not Specified

Sample Depth:
Matrix: Trip Blank (Aqueous)
Analytical Method: 1,8260C
Analytical Date: 12/11/20 20:10
Analyst: MKS

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-04 Date Collected: 12/08/20 00:00

Client ID: TRIP BLANK_20201208 Date Received: 12/08/20

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-04 Date Collected: 12/08/20 00:00

Client ID: TRIP BLANK_20201208 Date Received: 12/08/20

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	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	93		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/11/20 12:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1444319-5					
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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/11/20 12:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1444319-5					
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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/11/20 12:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1444319-5					
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	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1444319-3 WG1444319-4								
Methylene chloride	90		95		70-130	5		20
1,1-Dichloroethane	95		96		70-130	1		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	96		99		63-132	3		20
1,2-Dichloropropane	91		98		70-130	7		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	99		110		70-130	11		20
Tetrachloroethene	96		100		70-130	4		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	88		91		62-150	3		20
1,2-Dichloroethane	110		120		70-130	9		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	110		120		70-130	9		20
cis-1,3-Dichloropropene	99		100		70-130	1		20
1,1-Dichloropropene	94		99		70-130	5		20
Bromoform	110		120		54-136	9		20
1,1,2,2-Tetrachloroethane	100		120		67-130	18		20
Benzene	95		100		70-130	5		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	82		81		64-130	1		20
Bromomethane	**32**	Q	**33**	Q	39-139	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1444319-3 WG1444319-4								
Vinyl chloride	68		68		55-140	0		20
Chloroethane	78		81		55-138	4		20
1,1-Dichloroethene	82		88		61-145	7		20
trans-1,2-Dichloroethene	94		99		70-130	5		20
Trichloroethene	95		99		70-130	4		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		110		70-130	10		20
Methyl tert butyl ether	110		120		63-130	9		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	90		98		70-130	9		20
Dibromomethane	92		100		70-130	8		20
1,2,3-Trichloropropane	110		120		64-130	9		20
Acrylonitrile	120		130		70-130	8		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	58		60		36-147	3		20
Acetone	120		130		58-148	8		20
Carbon disulfide	87		90		51-130	3		20
2-Butanone	110		130		63-138	17		20
Vinyl acetate	100		110		70-130	10		20
4-Methyl-2-pentanone	97		120		59-130	**21**	Q	20
2-Hexanone	100		130		57-130	**26**	Q	20

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1444319-3 WG1444319-4								
Bromochloromethane	97		100		70-130	3		20
2,2-Dichloropropane	98		100		63-133	2		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	110		120		70-130	9		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	94		98		53-136	4		20
sec-Butylbenzene	92		92		70-130	0		20
tert-Butylbenzene	98		98		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	92		110		41-144	18		20
Hexachlorobutadiene	88		87		63-130	1		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	94		96		70-130	2		20
Naphthalene	92		110		70-130	18		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		110		70-130	12		20
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	60		78		56-162	**26**	Q	20
p-Diethylbenzene	94		98		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1444319-3 WG1444319-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	99		120		59-134	19		20
trans-1,4-Dichloro-2-butene	75		93		70-130	**21**	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		109		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	104		106		70-130
Dibromofluoromethane	96		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1444319-6 WG1444319-7 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Methylene chloride	ND	100	98	98		100	100		70-130	2		20
1,1-Dichloroethane	ND	100	110	110		110	110		70-130	0		20
Chloroform	ND	100	110	110		120	120		70-130	9		20
Carbon tetrachloride	ND	100	120	120		120	120		63-132	0		20
1,2-Dichloropropane	ND	100	100	100		100	100		70-130	0		20
Dibromochloromethane	ND	100	100	100		110	110		63-130	10		20
1,1,2-Trichloroethane	ND	100	110	110		110	110		70-130	0		20
Tetrachloroethene	ND	100	110	110		120	120		70-130	9		20
Chlorobenzene	ND	100	110	110		110	110		75-130	0		20
Trichlorofluoromethane	ND	100	120	120		120	120		62-150	0		20
1,2-Dichloroethane	ND	100	120	120		120	120		70-130	0		20
1,1,1-Trichloroethane	ND	100	120	120		130	130		67-130	8		20
Bromodichloromethane	ND	100	110	110		110	110		67-130	0		20
trans-1,3-Dichloropropene	ND	100	110	110		110	110		70-130	0		20
cis-1,3-Dichloropropene	ND	100	100	100		100	100		70-130	0		20
1,1-Dichloropropene	ND	100	120	120		120	120		70-130	0		20
Bromoform	ND	100	110	110		110	110		54-136	0		20
1,1,2,2-Tetrachloroethane	ND	100	110	110		110	110		67-130	0		20
Benzene	14	100	120	106		120	106		70-130	0		20
Toluene	17J	100	130	130		130	130		70-130	0		20
Ethylbenzene	17J	100	130	130		130	130		70-130	0		20
Chloromethane	ND	100	98	98		92	92		64-130	6		20
Bromomethane	ND	100	26	**26**	Q	35	**35**	Q	39-139	**30**	Q	20

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1444319-6 WG1444319-7 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Vinyl chloride	ND	100	81	81		84	84		55-140	4		20
Chloroethane	ND	100	89	89		92	92		55-138	3		20
1,1-Dichloroethene	ND	100	98	98		100	100		61-145	2		20
trans-1,2-Dichloroethene	ND	100	110	110		110	110		70-130	0		20
Trichloroethene	ND	100	110	110		110	110		70-130	0		20
1,2-Dichlorobenzene	ND	100	110	110		110	110		70-130	0		20
1,3-Dichlorobenzene	ND	100	110	110		110	110		70-130	0		20
1,4-Dichlorobenzene	ND	100	110	110		110	110		70-130	0		20
Methyl tert butyl ether	ND	100	120	120		120	120		63-130	0		20
p/m-Xylene	23J	200	240	120		240	120		70-130	0		20
o-Xylene	13J	200	230	115		230	115		70-130	0		20
cis-1,2-Dichloroethene	ND	100	100	100		100	100		70-130	0		20
Dibromomethane	ND	100	110	110		100	100		70-130	10		20
1,2,3-Trichloropropane	ND	100	120	120		120	120		64-130	0		20
Acrylonitrile	ND	100	120	120		120	120		70-130	0		20
Styrene	ND	200	210	105		210	105		70-130	0		20
Dichlorodifluoromethane	ND	100	80	80		78	78		36-147	3		20
Acetone	65	100	190	125		180	115		58-148	5		20
Carbon disulfide	ND	100	100	100		100	100		51-130	0		20
2-Butanone	ND	100	140	**140**	Q	130	130		63-138	7		20
Vinyl acetate	ND	100	120	120		120	120		70-130	0		20
4-Methyl-2-pentanone	ND	100	110	110		110	110		59-130	0		20
2-Hexanone	ND	100	120	120		120	120		57-130	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1444319-6 WG1444319-7 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Bromochloromethane	ND	100	110	110		110	110		70-130	0		20
2,2-Dichloropropane	ND	100	100	100		100	100		63-133	0		20
1,2-Dibromoethane	ND	100	110	110		110	110		70-130	0		20
1,3-Dichloropropane	ND	100	120	120		120	120		70-130	0		20
1,1,1,2-Tetrachloroethane	ND	100	110	110		110	110		64-130	0		20
Bromobenzene	ND	100	110	110		110	110		70-130	0		20
n-Butylbenzene	ND	100	110	110		110	110		53-136	0		20
sec-Butylbenzene	ND	100	100	100		100	100		70-130	0		20
tert-Butylbenzene	ND	100	110	110		110	110		70-130	0		20
o-Chlorotoluene	ND	100	120	120		110	110		70-130	9		20
p-Chlorotoluene	ND	100	110	110		110	110		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	100	110	110		100	100		41-144	10		20
Hexachlorobutadiene	ND	100	110	110		110	110		63-130	0		20
Isopropylbenzene	ND	100	110	110		110	110		70-130	0		20
p-Isopropyltoluene	ND	100	110	110		100	100		70-130	10		20
Naphthalene	1400	100	1500	100		1500	100		70-130	0		20
n-Propylbenzene	ND	100	120	120		110	110		69-130	9		20
1,2,3-Trichlorobenzene	ND	100	120	120		120	120		70-130	0		20
1,2,4-Trichlorobenzene	ND	100	110	110		120	120		70-130	9		20
1,3,5-Trimethylbenzene	ND	100	120	120		120	120		64-130	0		20
1,2,4-Trimethylbenzene	12J	100	120	120		120	120		70-130	0		20
1,4-Dioxane	ND	5000	3300	66		3700	74		56-162	11		20
p-Diethylbenzene	ND	100	120	120		110	110		70-130	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1444319-6 WG1444319-7 QC Sample: L2054742-01 Client ID: MW_D_20201208												
p-Ethyltoluene	7.9J	100	120	120		120	120		70-130	0		20
1,2,4,5-Tetramethylbenzene	ND	100	110	110		120	120		70-130	9		20
Ethyl ether	ND	100	110	110		110	110		59-134	0		20
trans-1,4-Dichloro-2-butene	ND	100	71	71		70	70		70-130	1		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		112		70-130
4-Bromofluorobenzene	104		106		70-130
Dibromofluoromethane	95		98		70-130
Toluene-d8	99		100		70-130

SEMIVOLATILES

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01
Client ID: MW_D_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 13:25
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/14/20 16:17
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

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	22.		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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 Date Collected: 12/08/20 13:25

Client ID: MW_D_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	57.		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	3.3	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	81.		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	470	E	ug/l	5.0	0.57	1
2-Methylphenol	53.		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	140		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	75.		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	180		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	119		10-120
4-Terphenyl-d14	108		41-149

Project Name: AVALON BAY SUN SITES-PCE
Lab Number: L2054742
Project Number: 180132
Report Date: 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D
Client ID: MW_D_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 13:25
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/15/20 10:28
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	510		ug/l	25	2.8	5

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D
Client ID: MW_D_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 13:25
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 15:13
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	84		ug/l	2.0	0.29	20
2-Chloronaphthalene	ND		ug/l	4.0	0.36	20
Fluoranthene	24		ug/l	2.0	0.41	20
Hexachlorobutadiene	ND		ug/l	10	0.93	20
Naphthalene	1100		ug/l	2.0	0.98	20
Benzo(a)anthracene	2.7		ug/l	2.0	0.40	20
Benzo(a)pyrene	1.2	J	ug/l	2.0	0.30	20
Benzo(b)fluoranthene	1.3	J	ug/l	2.0	0.23	20
Benzo(k)fluoranthene	0.38	J	ug/l	2.0	0.18	20
Chrysene	1.6	J	ug/l	2.0	0.24	20
Acenaphthylene	33		ug/l	2.0	0.24	20
Anthracene	25		ug/l	2.0	0.29	20
Benzo(ghi)perylene	0.48	J	ug/l	2.0	0.27	20
Fluorene	68		ug/l	2.0	0.29	20
Phenanthrene	120		ug/l	2.0	0.47	20
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.25	20
Indeno(1,2,3-cd)pyrene	0.51	J	ug/l	2.0	0.24	20
Pyrene	19		ug/l	2.0	0.38	20
2-Methylnaphthalene	130		ug/l	2.0	0.44	20
Pentachlorophenol	ND		ug/l	16	0.29	20
Hexachlorobenzene	ND		ug/l	16	0.19	20
Hexachloroethane	ND		ug/l	16	1.3	20

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 D
Client ID: MW_D_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 13:25
Date Received: 12/08/20
Field Prep: Refer to COC

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	**0**	Q	21-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	15-120
2,4,6-Tribromophenol	**0**	Q	10-120
4-Terphenyl-d14	**0**	Q	41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02
Client ID: MW_C_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:00
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/14/20 15:55
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	92		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02
Client ID: MW_C_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:00
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 17:13
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.16		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.07	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Acenaphthylene	0.02	J	ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.03	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	ND		ug/l	0.10	0.01	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.74	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	35		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	103		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	102		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03
Client ID: FIELD BLANK_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:30
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8270D
Analytical Date: 12/14/20 15:32
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	57		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	98		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03
Client ID: FIELD BLANK_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:30
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8270D-SIM
Analytical Date: 12/17/20 15:00
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

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	0.14		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	ND		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	0.02	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	0.04	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	**134**	Q	10-120
4-Terphenyl-d14	118		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 RE
Client ID: FIELD BLANK_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:30
Date Received: 12/08/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Field Blank
Analytical Method: 1,8270D-SIM
Analytical Date: 12/18/20 10:13
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/17/20 11:45

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	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.01	J	ug/l	0.10	0.01	1
Phenanthrene	0.02	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	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 RE
Client ID: FIELD BLANK_20201208
Sample Location: YONKERS, NY

Date Collected: 12/08/20 15:30
Date Received: 12/08/20
Field Prep: Refer to COC

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	47		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	86		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/14/20 13:07
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444581-1					
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: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/14/20 13:07
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444581-1					
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: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/14/20 13:07
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444581-1					
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	49		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	105		41-149

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/13/20 23:55
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1444582-1					
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: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/13/20 23:55
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/13/20 15:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1444582-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	96		41-149

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/18/20 09:34
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/17/20 11:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1446301-1					
Acenaphthene	0.04	J	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	0.04	J	ug/l	0.10	0.01
Phenanthrene	0.04	J	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	0.13	J	ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/18/20 09:34
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/17/20 11:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03 Batch: WG1446301-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	111		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444581-2 WG1444581-3								
Acenaphthene	94		81		37-111	15		30
1,2,4-Trichlorobenzene	92		78		39-98	16		30
Hexachlorobenzene	98		84		40-140	15		30
Bis(2-chloroethyl)ether	90		77		40-140	16		30
2-Chloronaphthalene	98		82		40-140	18		30
1,2-Dichlorobenzene	91		78		40-140	15		30
1,3-Dichlorobenzene	88		77		40-140	13		30
1,4-Dichlorobenzene	90		76		36-97	17		30
3,3'-Dichlorobenzidine	81		62		40-140	27		30
2,4-Dinitrotoluene	97		83		48-143	16		30
2,6-Dinitrotoluene	101		85		40-140	17		30
Fluoranthene	107		91		40-140	16		30
4-Chlorophenyl phenyl ether	100		84		40-140	17		30
4-Bromophenyl phenyl ether	104		87		40-140	18		30
Bis(2-chloroisopropyl)ether	81		68		40-140	17		30
Bis(2-chloroethoxy)methane	88		77		40-140	13		30
Hexachlorobutadiene	88		75		40-140	16		30
Hexachlorocyclopentadiene	77		68		40-140	12		30
Hexachloroethane	85		74		40-140	14		30
Isophorone	89		75		40-140	17		30
Naphthalene	94		80		40-140	16		30
Nitrobenzene	88		77		40-140	13		30
NDPA/DPA	103		87		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444581-2 WG1444581-3								
n-Nitrosodi-n-propylamine	92		78		29-132	16		30
Bis(2-ethylhexyl)phthalate	98		80		40-140	20		30
Butyl benzyl phthalate	104		86		40-140	19		30
Di-n-butylphthalate	99		82		40-140	19		30
Di-n-octylphthalate	92		77		40-140	18		30
Diethyl phthalate	101		86		40-140	16		30
Dimethyl phthalate	108		89		40-140	19		30
Benzo(a)anthracene	101		87		40-140	15		30
Benzo(a)pyrene	106		88		40-140	19		30
Benzo(b)fluoranthene	111		89		40-140	22		30
Benzo(k)fluoranthene	107		97		40-140	10		30
Chrysene	103		86		40-140	18		30
Acenaphthylene	98		86		45-123	13		30
Anthracene	102		85		40-140	18		30
Benzo(ghi)perylene	102		88		40-140	15		30
Fluorene	100		85		40-140	16		30
Phenanthrene	100		84		40-140	17		30
Dibenzo(a,h)anthracene	105		89		40-140	16		30
Indeno(1,2,3-cd)pyrene	102		82		40-140	22		30
Pyrene	106		89		26-127	17		30
Biphenyl	102		86		40-140	17		30
4-Chloroaniline	73		76		40-140	4		30
2-Nitroaniline	93		81		52-143	14		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444581-2 WG1444581-3								
3-Nitroaniline	81		69		25-145	16		30
4-Nitroaniline	90		79		51-143	13		30
Dibenzofuran	98		83		40-140	17		30
2-Methylnaphthalene	95		82		40-140	15		30
1,2,4,5-Tetrachlorobenzene	98		82		2-134	18		30
Acetophenone	94		78		39-129	19		30
2,4,6-Trichlorophenol	104		91		30-130	13		30
p-Chloro-m-cresol	97		83		23-97	16		30
2-Chlorophenol	93		81		27-123	14		30
2,4-Dichlorophenol	100		85		30-130	16		30
2,4-Dimethylphenol	91		79		30-130	14		30
2-Nitrophenol	97		84		30-130	14		30
4-Nitrophenol	75		65		10-80	14		30
2,4-Dinitrophenol	86		80		20-130	7		30
4,6-Dinitro-o-cresol	98		84		20-164	15		30
Pentachlorophenol	92		80		9-103	14		30
Phenol	64		55		12-110	15		30
2-Methylphenol	88		75		30-130	16		30
3-Methylphenol/4-Methylphenol	96		81		30-130	17		30
2,4,5-Trichlorophenol	104		88		30-130	17		30
Benzoic Acid	36		36		10-164	0		30
Benzyl Alcohol	80		70		26-116	13		30
Carbazole	103		87		55-144	17		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444581-2 WG1444581-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		69		21-120
Phenol-d6	63		54		10-120
Nitrobenzene-d5	89		74		23-120
2-Fluorobiphenyl	93		79		15-120
2,4,6-Tribromophenol	**135**	Q	115		10-120
4-Terphenyl-d14	106		89		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1444582-2 WG1444582-3								
Acenaphthene	94		91		40-140	3		40
2-Chloronaphthalene	95		90		40-140	5		40
Fluoranthene	104		102		40-140	2		40
Hexachlorobutadiene	81		73		40-140	10		40
Naphthalene	93		92		40-140	1		40
Benzo(a)anthracene	106		103		40-140	3		40
Benzo(a)pyrene	117		116		40-140	1		40
Benzo(b)fluoranthene	111		109		40-140	2		40
Benzo(k)fluoranthene	106		109		40-140	3		40
Chrysene	106		105		40-140	1		40
Acenaphthylene	103		98		40-140	5		40
Anthracene	105		104		40-140	1		40
Benzo(ghi)perylene	106		105		40-140	1		40
Fluorene	97		95		40-140	2		40
Phenanthrene	99		97		40-140	2		40
Dibenzo(a,h)anthracene	106		106		40-140	0		40
Indeno(1,2,3-cd)pyrene	103		103		40-140	0		40
Pyrene	104		102		40-140	2		40
2-Methylnaphthalene	96		91		40-140	5		40
Pentachlorophenol	132		131		40-140	1		40
Hexachlorobenzene	109		102		40-140	7		40
Hexachloroethane	96		87		40-140	10		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1444582-2 WG1444582-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		64		21-120
Phenol-d6	58		55		10-120
Nitrobenzene-d5	108		102		23-120
2-Fluorobiphenyl	93		80		15-120
2,4,6-Tribromophenol	99		98		10-120
4-Terphenyl-d14	87		85		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1446301-2 WG1446301-3								
Acenaphthene	82		72		40-140	13		40
2-Chloronaphthalene	98		89		40-140	10		40
Fluoranthene	109		97		40-140	12		40
Hexachlorobutadiene	89		86		40-140	3		40
Naphthalene	83		74		40-140	11		40
Benzo(a)anthracene	104		93		40-140	11		40
Benzo(a)pyrene	124		110		40-140	12		40
Benzo(b)fluoranthene	102		92		40-140	10		40
Benzo(k)fluoranthene	114		98		40-140	15		40
Chrysene	96		84		40-140	13		40
Acenaphthylene	104		95		40-140	9		40
Anthracene	101		88		40-140	14		40
Benzo(ghi)perylene	105		95		40-140	10		40
Fluorene	96		84		40-140	13		40
Phenanthrene	91		80		40-140	13		40
Dibenzo(a,h)anthracene	119		105		40-140	13		40
Indeno(1,2,3-cd)pyrene	113		102		40-140	10		40
Pyrene	109		97		40-140	12		40
2-Methylnaphthalene	94		84		40-140	11		40
Pentachlorophenol	**144**	Q	114		40-140	23		40
Hexachlorobenzene	96		84		40-140	13		40
Hexachloroethane	77		72		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03 Batch: WG1446301-2 WG1446301-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	64		57		21-120
Phenol-d6	53		48		10-120
Nitrobenzene-d5	107		95		23-120
2-Fluorobiphenyl	98		90		15-120
2,4,6-Tribromophenol	**147**	Q	**131**	Q	10-120
4-Terphenyl-d14	114		101		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1444581-4 WG1444581-5 QC Sample: L2054742-01 Client ID: MW_D_20201208												
1,2,4-Trichlorobenzene	ND	18.2	18	**99**	Q	17	94		39-98	6		30
Bis(2-chloroethyl)ether	ND	18.2	18	99		17	94		40-140	6		30
1,2-Dichlorobenzene	ND	18.2	17	94		16	88		40-140	6		30
1,3-Dichlorobenzene	ND	18.2	16	88		16	88		40-140	0		30
1,4-Dichlorobenzene	ND	18.2	17	94		16	88		36-97	6		30
3,3'-Dichlorobenzidine	ND	18.2	ND	**0**	Q	ND	**0**	Q	40-140	NC		30
2,4-Dinitrotoluene	ND	18.2	21	120		20	110		48-143	5		30
2,6-Dinitrotoluene	ND	18.2	21	120		21	120		40-140	0		30
4-Chlorophenyl phenyl ether	ND	18.2	18	99		18	99		40-140	0		30
4-Bromophenyl phenyl ether	ND	18.2	19	100		19	100		40-140	0		30
Bis(2-chloroisopropyl)ether	ND	18.2	17	94		16	88		40-140	6		30
Bis(2-chloroethoxy)methane	ND	18.2	21	120		20	110		40-140	5		30
Hexachlorocyclopentadiene	ND	18.2	16.J	88		16.J	88		40-140	0		30
Isophorone	ND	18.2	19	100		19	100		40-140	0		30
Nitrobenzene	ND	18.2	20	110		18	99		40-140	11		30
NDPA/DPA	ND	18.2	22	120		21	120		40-140	5		30
n-Nitrosodi-n-propylamine	ND	18.2	19	100		19	100		29-132	0		30
Bis(2-ethylhexyl)phthalate	ND	18.2	22	120		22	120		40-140	0		30
Butyl benzyl phthalate	ND	18.2	25	140		23	130		40-140	8		30
Di-n-butylphthalate	ND	18.2	23	130		22	120		40-140	4		30
Di-n-octylphthalate	ND	18.2	24	130		22	120		40-140	9		30
Diethyl phthalate	ND	18.2	20	110		20	110		40-140	0		30
Dimethyl phthalate	ND	18.2	20	110		20	110		40-140	0		30

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1444581-4 WG1444581-5 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Biphenyl	22	18.2	42	110		42	110		40-140	0		30
4-Chloroaniline	ND	18.2	15	83		14	77		40-140	7		30
2-Nitroaniline	ND	18.2	23	130		23	130		52-143	0		30
3-Nitroaniline	ND	18.2	ND	**0**	Q	ND	**0**	Q	25-145	NC		30
4-Nitroaniline	ND	18.2	13	72		12	66		51-143	8		30
Dibenzofuran	57	18.2	75	99		76	100		40-140	1		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	18	99		17	94		2-134	6		30
Acetophenone	3.3J	18.2	22	120		21	120		39-129	5		30
2,4,6-Trichlorophenol	ND	18.2	20	110		20	110		30-130	0		30
p-Chloro-m-cresol	ND	18.2	20	**110**	Q	20	**110**	Q	23-97	0		30
2-Chlorophenol	ND	18.2	18	99		18	99		27-123	0		30
2,4-Dichlorophenol	ND	18.2	21	120		20	110		30-130	5		30
2,4-Dimethylphenol	81	18.2	120	**210**	Q	120	**210**	Q	30-130	0		30
2-Nitrophenol	ND	18.2	21	120		20	110		30-130	5		30
4-Nitrophenol	ND	18.2	ND	**0**	Q	ND	**0**	Q	10-80	NC		30
2,4-Dinitrophenol	ND	18.2	24	130		24	130		20-130	0		30
4,6-Dinitro-o-cresol	ND	18.2	22	120		22	120		20-164	0		30
Phenol	470E	18.2	520E	**280**	Q	490E	110		12-110	6		30
2-Methylphenol	53	18.2	74	120		70	94		30-130	6		30
3-Methylphenol/4-Methylphenol	140	18.2	160	110		150	55		30-130	6		30
2,4,5-Trichlorophenol	ND	18.2	21	120		21	120		30-130	0		30
Benzoic Acid	75	18.2	94	100		90	83		10-164	4		30
Benzyl Alcohol	ND	18.2	25	**140**	Q	24	**130**	Q	26-116	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1444581-4 WG1444581-5 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Carbazole	180	18.2	200E	110		180E	**0**	Q	55-144	11		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	**154**	Q	**148**	Q	10-120
2-Fluorobiphenyl	91		91		15-120
2-Fluorophenol	88		85		21-120
4-Terphenyl-d14	113		105		41-149
Nitrobenzene-d5	101		102		23-120
Phenol-d6	70		68		10-120

METALS

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 Date Collected: 12/08/20 13:25

Client ID: MW_D_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	1.62		mg/l	0.0100	0.00327	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Antimony, Total	0.00456		mg/l	0.00400	0.00042	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01882		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Barium, Total	0.08714		mg/l	0.00050	0.00017	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00022		mg/l	0.00020	0.00005	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Calcium, Total	37.7		mg/l	0.100	0.0394	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Chromium, Total	0.00248		mg/l	0.00100	0.00017	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00095		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Copper, Total	0.1026		mg/l	0.00100	0.00038	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Iron, Total	0.791		mg/l	0.0500	0.0191	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Lead, Total	0.07462		mg/l	0.00100	0.00034	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Magnesium, Total	7.72		mg/l	0.0700	0.0242	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Manganese, Total	0.1124		mg/l	0.00100	0.00044	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Mercury, Total	0.03118		mg/l	0.00200	0.00091	10	12/16/20 10:17	12/17/20 15:45	EPA 7470A	1,7470A	EW
Nickel, Total	0.03885		mg/l	0.00200	0.00055	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Potassium, Total	104.		mg/l	0.100	0.0309	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Sodium, Total	160.		mg/l	0.100	0.0293	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Thallium, Total	0.00027	J	mg/l	0.00100	0.00014	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00255	J	mg/l	0.00500	0.00157	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Zinc, Total	0.06670		mg/l	0.01000	0.00341	1	12/16/20 07:28	12/16/20 11:43	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.376		mg/l	0.0100	0.00327	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00295	J	mg/l	0.00400	0.00042	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01479		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05571		mg/l	0.00050	0.00017	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-01 Date Collected: 12/08/20 13:25

Client ID: MW_D_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Calcium, Dissolved	24.8		mg/l	0.100	0.0394	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00082		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00404		mg/l	0.00100	0.00038	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0266	J	mg/l	0.0500	0.0191	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00043	J	mg/l	0.00100	0.00034	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	1.28		mg/l	0.0700	0.0242	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.01623		mg/l	0.00020	0.00009	1	12/15/20 20:53	12/16/20 19:18	EPA 7470A	1,7470A	EW
Nickel, Dissolved	0.04445		mg/l	0.00200	0.00055	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Potassium, Dissolved	120.		mg/l	0.100	0.0309	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Sodium, Dissolved	170.		mg/l	0.100	0.0293	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00014	J	mg/l	0.00100	0.00014	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/15/20 20:22	12/16/20 09:18	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	0.0821		mg/l	0.0100	0.00327	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Antimony, Total	0.00223	J	mg/l	0.00400	0.00042	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00159		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Barium, Total	0.08096		mg/l	0.00050	0.00017	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Calcium, Total	102.		mg/l	0.100	0.0394	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00019	J	mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Copper, Total	0.00568		mg/l	0.00100	0.00038	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Iron, Total	0.665		mg/l	0.0500	0.0191	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Lead, Total	0.00312		mg/l	0.00100	0.00034	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Magnesium, Total	6.57		mg/l	0.0700	0.0242	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Manganese, Total	0.08123		mg/l	0.00100	0.00044	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/16/20 10:17	12/16/20 19:38	EPA 7470A	1,7470A	EW
Nickel, Total	0.00143	J	mg/l	0.00200	0.00055	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Potassium, Total	10.9		mg/l	0.100	0.0309	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Sodium, Total	44.7		mg/l	0.100	0.0293	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Thallium, Total	0.00016	J	mg/l	0.00100	0.00014	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Zinc, Total	0.02448		mg/l	0.01000	0.00341	1	12/16/20 07:28	12/16/20 11:48	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00186	J	mg/l	0.00400	0.00042	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00086		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.07792		mg/l	0.00050	0.00017	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-02 Date Collected: 12/08/20 15:00

Client ID: MW_C_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Calcium, Dissolved	105.		mg/l	0.100	0.0394	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00265		mg/l	0.00100	0.00038	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0871		mg/l	0.0500	0.0191	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	6.62		mg/l	0.0700	0.0242	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.05053		mg/l	0.00100	0.00044	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/15/20 20:53	12/16/20 19:47	EPA 7470A	1,7470A	EW
Nickel, Dissolved	0.00125	J	mg/l	0.00200	0.00055	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Potassium, Dissolved	11.2		mg/l	0.100	0.0309	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Sodium, Dissolved	45.8		mg/l	0.100	0.0293	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01906		mg/l	0.01000	0.00341	1	12/15/20 20:22	12/16/20 09:23	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Matrix: Field Blank

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Barium, Total	0.00019	J	mg/l	0.00050	0.00017	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Calcium, Total	0.0529	J	mg/l	0.100	0.0394	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Manganese, Total	0.00118		mg/l	0.00100	0.00044	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/16/20 10:17	12/16/20 19:41	EPA 7470A	1,7470A	EW
Nickel, Total	ND		mg/l	0.00200	0.00055	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Sodium, Total	0.235		mg/l	0.100	0.0293	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	12/16/20 07:28	12/16/20 11:18	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00050		mg/l	0.00050	0.00017	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054742-03 Date Collected: 12/08/20 15:30

Client ID: FIELD BLANK_20201208 Date Received: 12/08/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Matrix: Field Blank

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	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Calcium, Dissolved	0.0825	J	mg/l	0.100	0.0394	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/15/20 20:53	12/16/20 19:50	EPA 7470A	1,7470A	EW
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Sodium, Dissolved	0.431		mg/l	0.100	0.0293	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/15/20 20:22	12/16/20 09:13	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

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): 01-03 Batch: WG1445287-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	12/16/20 07:28	12/16/20 11:13	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	12/16/20 07:28	12/16/20 11:13	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): 01-03 Batch: WG1445290-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/16/20 10:17	12/16/20 19:13	1,7470A	EW

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

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): 01-03 Batch: WG1445333-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Thallium, Dissolved	0.00016	J	mg/l	0.00100	0.00014	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/15/20 20:22	12/16/20 09:08	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054742

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1445334-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/15/20 20:53	12/16/20 19:12	1,7470A	EW

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445287-2								
Aluminum, Total	104		-		80-120	-		
Antimony, Total	87		-		80-120	-		
Arsenic, Total	100		-		80-120	-		
Barium, Total	103		-		80-120	-		
Beryllium, Total	104		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Calcium, Total	98		-		80-120	-		
Chromium, Total	92		-		80-120	-		
Cobalt, Total	96		-		80-120	-		
Copper, Total	95		-		80-120	-		
Iron, Total	95		-		80-120	-		
Lead, Total	100		-		80-120	-		
Magnesium, Total	102		-		80-120	-		
Manganese, Total	95		-		80-120	-		
Nickel, Total	93		-		80-120	-		
Potassium, Total	102		-		80-120	-		
Selenium, Total	103		-		80-120	-		
Silver, Total	103		-		80-120	-		
Sodium, Total	102		-		80-120	-		
Thallium, Total	97		-		80-120	-		
Vanadium, Total	93		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445287-2					
Zinc, Total	106	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445290-2					
Mercury, Total	101	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445333-2					
Aluminum, Dissolved	100	-	80-120	-	
Antimony, Dissolved	98	-	80-120	-	
Arsenic, Dissolved	102	-	80-120	-	
Barium, Dissolved	103	-	80-120	-	
Beryllium, Dissolved	116	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Calcium, Dissolved	98	-	80-120	-	
Chromium, Dissolved	97	-	80-120	-	
Cobalt, Dissolved	100	-	80-120	-	
Copper, Dissolved	100	-	80-120	-	
Iron, Dissolved	94	-	80-120	-	
Lead, Dissolved	103	-	80-120	-	
Magnesium, Dissolved	100	-	80-120	-	
Manganese, Dissolved	98	-	80-120	-	
Nickel, Dissolved	96	-	80-120	-	
Potassium, Dissolved	100	-	80-120	-	
Selenium, Dissolved	107	-	80-120	-	
Silver, Dissolved	105	-	80-120	-	
Sodium, Dissolved	99	-	80-120	-	
Thallium, Dissolved	100	-	80-120	-	
Vanadium, Dissolved	96	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054742

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445333-2					
Zinc, Dissolved	107	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445334-2					
Mercury, Dissolved	84	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445287-3 WG1445287-4 QC Sample: L2054742-01 Client ID: MW_D_20201208												
Aluminum, Total	1.62	2	3.91	114		3.83	110		75-125	2		20
Antimony, Total	0.00456	0.5	0.5931	118		0.5604	111		75-125	6		20
Arsenic, Total	0.01882	0.12	0.1559	114		0.1501	109		75-125	4		20
Barium, Total	0.08714	2	2.335	112		2.247	108		75-125	4		20
Beryllium, Total	ND	0.05	0.05506	110		0.05317	106		75-125	3		20
Cadmium, Total	0.00022	0.051	0.05928	116		0.05730	112		75-125	3		20
Calcium, Total	37.7	10	53.6	**159**	Q	53.1	**154**	Q	75-125	1		20
Chromium, Total	0.00248	0.2	0.1970	97		0.1910	94		75-125	3		20
Cobalt, Total	0.00095	0.5	0.5290	106		0.5090	102		75-125	4		20
Copper, Total	0.1026	0.25	0.3844	113		0.3842	113		75-125	0		20
Iron, Total	0.791	1	2.06	**127**	Q	1.90	111		75-125	8		20
Lead, Total	0.07462	0.51	0.6410	111		0.6205	107		75-125	3		20
Magnesium, Total	7.72	10	19.1	114		18.7	110		75-125	2		20
Manganese, Total	0.1124	0.5	0.6359	105		0.6198	101		75-125	3		20
Nickel, Total	0.03885	0.5	0.5428	101		0.5175	96		75-125	5		20
Potassium, Total	104.	10	129	**250**	Q	129	**250**	Q	75-125	0		20
Selenium, Total	ND	0.12	0.0957	80		0.0926	77		75-125	3		20
Silver, Total	ND	0.05	0.05557	111		0.05387	108		75-125	3		20
Sodium, Total	160.	10	182	**220**	Q	182	**220**	Q	75-125	0		20
Thallium, Total	0.00027J	0.12	0.1350	112		0.1255	104		75-125	7		20
Vanadium, Total	0.00255J	0.5	0.5137	103		0.4886	98		75-125	5		20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445287-3 WG1445287-4 QC Sample: L2054742-01 Client ID: MW_D_20201208											
Zinc, Total	0.06670	0.5	0.6574	118		0.6375	114		75-125	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445290-3 WG1445290-4 QC Sample: L2054742-01 Client ID: MW_D_20201208											
Mercury, Total	0.03118	0.002	0.03692	**287**	Q	0.03693	**288**	Q	75-125	0	20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445333-3 WG1445333-4 QC Sample: L2054742-01 Client ID: MW_D_20201208											
Aluminum, Dissolved	0.376	2	2.48	105		2.35	99		75-125	5	20
Antimony, Dissolved	0.00295J	0.5	0.5138	103		0.5192	104		75-125	1	20
Arsenic, Dissolved	0.01479	0.12	0.1414	106		0.1403	104		75-125	1	20
Barium, Dissolved	0.05571	2	2.176	106		2.101	102		75-125	4	20
Beryllium, Dissolved	ND	0.05	0.05451	109		0.05079	102		75-125	7	20
Cadmium, Dissolved	ND	0.051	0.05545	109		0.05467	107		75-125	1	20
Calcium, Dissolved	24.8	10	35.7	109		35.1	103		75-125	2	20
Chromium, Dissolved	ND	0.2	0.1828	91		0.1777	89		75-125	3	20
Cobalt, Dissolved	0.00082	0.5	0.4939	99		0.4862	97		75-125	2	20
Copper, Dissolved	0.00404	0.25	0.2522	99		0.2480	98		75-125	2	20
Iron, Dissolved	0.0266J	1	0.973	97		0.943	94		75-125	3	20
Lead, Dissolved	0.00043J	0.51	0.5242	103		0.5092	100		75-125	3	20
Magnesium, Dissolved	1.28	10	11.4	101		11.0	97		75-125	4	20
Manganese, Dissolved	ND	0.5	0.4901	98		0.4696	94		75-125	4	20
Nickel, Dissolved	0.04445	0.5	0.5258	96		0.5022	92		75-125	5	20
Potassium, Dissolved	120.	10	134	**140**	Q	132	120		75-125	2	20
Selenium, Dissolved	ND	0.12	0.0748	**62**	Q	0.0650	**54**	Q	75-125	14	20
Silver, Dissolved	ND	0.05	0.05182	104		0.05073	101		75-125	2	20
Sodium, Dissolved	170.	10	205	**350**	Q	174	**40**	Q	75-125	16	20
Thallium, Dissolved	0.00014J	0.12	0.1179	98		0.1163	97		75-125	1	20
Vanadium, Dissolved	ND	0.5	0.4709	94		0.4668	93		75-125	1	20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054742
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445333-3 WG1445333-4 QC Sample: L2054742-01 Client ID: MW_D_20201208									
Zinc, Dissolved	ND	0.5	0.5399	108	0.5323	106	75-125	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445334-3 WG1445334-4 QC Sample: L2054742-01 Client ID: MW_D_20201208									
Mercury, Dissolved	0.01623	0.005	0.02149	105	0.02149	105	75-125	0	20

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054742
Report Date: 12/18/20

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(*)
L2054742-01A	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01A1	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01A2	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01B	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01B1	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01B2	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01C	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01C1	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01C2	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-01D	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		V-6020S(180),K-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),ZN-6020S(180),CO-6020S(180),MG-6020S(180),BE-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),BA-6020S(180),TL-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2054742-01D1	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		V-6020S(180),K-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),ZN-6020S(180),CO-6020S(180),MG-6020S(180),BE-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),BA-6020S(180),TL-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)

*Values in parentheses indicate holding time in days

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054742
Report Date: 12/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2054742-01D2	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		V-6020S(180),K-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),ZN-6020S(180),CO-6020S(180),MG-6020S(180),BE-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),BA-6020S(180),TL-6020S(180),SB-6020S(180),AG-6020S(180),AS-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2054742-01E	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-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),MG-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2054742-01E1	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-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),MG-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2054742-01E2	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-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),MG-6020T(180),CD-6020T(180),AG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2054742-01F	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-01F1	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-01F2	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-01G	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-01G1	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-01G2	Amber 250ml unpreserved	A	11	11	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-02A	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-02B	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054742
Report Date: 12/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2054742-02C	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-02D	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		SE-6020S(180),K-6020S(180),CU-6020S(180),V-6020S(180),MN-6020S(180),MG-6020S(180),BE-6020S(180),ZN-6020S(180),CO-6020S(180),FE-6020S(180),CR-6020S(180),CA-6020S(180),TL-6020S(180),PB-6020S(180),NI-6020S(180),BA-6020S(180),NA-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L2054742-02E	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		BA-6020T(180),FE-6020T(180),TL-6020T(180),SE-6020T(180),NI-6020T(180),K-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),V-6020T(180),AS-6020T(180),SB-6020T(180),HG-T(28),AG-6020T(180),MG-6020T(180),CD-6020T(180),AL-6020T(180),CO-6020T(180)
L2054742-02F	Amber 250ml unpreserved	A	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-02G	Amber 250ml unpreserved	A	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-03A	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-03B	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-03C	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-03D	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		CU-6020S(180),V-6020S(180),K-6020S(180),SE-6020S(180),MN-6020S(180),BE-6020S(180),MG-6020S(180),ZN-6020S(180),CO-6020S(180),FE-6020S(180),CA-6020S(180),CR-6020S(180),NI-6020S(180),TL-6020S(180),NA-6020S(180),PB-6020S(180),BA-6020S(180),AS-6020S(180),AG-6020S(180),SB-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2054742-03E	Plastic 250ml HNO3 preserved	A	<2	<2	5.4	Y	Absent		TL-6020T(180),FE-6020T(180),BA-6020T(180),SE-6020T(180),CR-6020T(180),CA-6020T(180),NI-6020T(180),K-6020T(180),NA-6020T(180),ZN-6020T(180),CU-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),MG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)

*Values in parentheses indicate holding time in days

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054742
Report Date: 12/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2054742-03F	Amber 250ml unpreserved	A	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-03G	Amber 250ml unpreserved	A	7	7	5.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054742-04A	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)
L2054742-04B	Vial HCl preserved	A	NA		5.4	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

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.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

Footnotes

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

Data Qualifiers

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.

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, Naphthalene
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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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

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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: 12/9/20

ALPHA Job #: L2054742

Client Information
Client: AKRF Inc
Address: 34 South Broadway, 401 White Plains, NY
Phone: 914 922 7387
Fax:
Email: pmchugh@akrf.com

Project Information
Project Name: Avalon Bay Sun Sites - PCE
Project Location: Yonkers, NY
Project #: 180432
(Use Project name as Project #)
Project Manager: Patrick 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: ✓ EQuIS EDD

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 add Sgrens@akrf.com on correspondence / Category B Deliverables

Please specify Metals or TAL.

ANALYSIS

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	VOCs	SVOCs	Metals (Total/Dissolved)	Total Bottle	Sample Specific Comments
54742-01	MW-D_20201208	12/8/20	1325	GW	TG	X	X	X		
	MW-D_MS_20201208		1330			X	X	X		
	MW-D_MSD_20201208		1330			X	X	X		
-02	MW-C_20201208		1500			X	X	X		
-03	FIELD BLANK_20201208		1530			X				
-04	TRIP BLANK					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	P
Preservative	B	A	C

Relinquished By:	Date/Time	Received By:	Date/Time
Tom Gordon AKRF	12/8/20 1609	AAL	12/8/20 1609
	12/8/20 1740	AAL	12/8/20 20:30
AAL	12/9/20 00:30		12/9/20 00:30

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:	L2054986
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVALON BAY SUN SITES-PCE
Project Number:	180132
Report Date:	12/18/20

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).

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

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2054986-01	MW_A_20201209	WATER	YONKERS, NY	12/09/20 09:40	12/09/20
L2054986-02	MW_B_20201209	WATER	YONKERS, NY	12/09/20 11:00	12/09/20
L2054986-03	MW_X_20201209	WATER	YONKERS, NY	12/09/20 10:15	12/09/20

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

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.

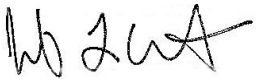
Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

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:  Jennifer L Clements

Title: Technical Director/Representative Date: 12/18/20

ORGANICS

VOLATILES

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40
Client ID: MW_A_20201209 Date Received: 12/09/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/12/20 11:44
Analyst: MKS

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	0.20	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	0.78		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	1.7	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	1.7	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.8		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	1.6	J	ug/l	2.5	0.70	1
o-Xylene	0.98	J	ug/l	2.5	0.70	1
Xylenes, Total	2.6	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	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	20		ug/l	2.5	0.70	1

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	0.71	J	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	0.78	J	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	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00
Client ID: MW_B_20201209 Date Received: 12/09/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/12/20 12:08
Analyst: MKS

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	0.55		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	0.18	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.89		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	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
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	2.3	J	ug/l	2.5	0.70	1

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	420		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	0.61	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	102		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	99		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15
Client ID: MW_X_20201209 Date Received: 12/09/20
Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/12/20 12:31
Analyst: MKS

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	0.21	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	0.75		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	1.7	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	0.97	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.8		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	1.6	J	ug/l	2.5	0.70	1
o-Xylene	0.93	J	ug/l	2.5	0.70	1
Xylenes, Total	2.5	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	9.3		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	17		ug/l	2.5	0.70	1

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	0.72	J	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	0.77	J	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	102		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/12/20 08:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444523-5					
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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/12/20 08:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444523-5					
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	1.5	J	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/12/20 08:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1444523-5					
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	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444523-3 WG1444523-4								
Methylene chloride	96		95		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		99		70-130	0		20
Carbon tetrachloride	88		86		63-132	2		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	90		89		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	74		71		62-150	4		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	90		87		67-130	3		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	93		91		70-130	2		20
Bromoform	100		99		54-136	1		20
1,1,2,2-Tetrachloroethane	120		120		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		99		70-130	1		20
Chloromethane	89		88		64-130	1		20
Bromomethane	69		62		39-139	11		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444523-3 WG1444523-4								
Vinyl chloride	90		87		55-140	3		20
Chloroethane	92		95		55-138	3		20
1,1-Dichloroethene	93		90		61-145	3		20
trans-1,2-Dichloroethene	98		97		70-130	1		20
Trichloroethene	95		94		70-130	1		20
1,2-Dichlorobenzene	110		100		70-130	10		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	110		100		70-130	10		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	120		120		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	58		56		36-147	4		20
Acetone	120		130		58-148	8		20
Carbon disulfide	88		86		51-130	2		20
2-Butanone	120		130		63-138	8		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	120		130		59-130	8		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444523-3 WG1444523-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	95		92		63-133	3		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	99		98		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	100		96		53-136	4		20
sec-Butylbenzene	100		96		70-130	4		20
tert-Butylbenzene	100		96		70-130	4		20
o-Chlorotoluene	110		100		70-130	10		20
p-Chlorotoluene	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	120		100		41-144	18		20
Hexachlorobutadiene	100		86		63-130	15		20
Isopropylbenzene	100		99		70-130	1		20
p-Isopropyltoluene	100		97		70-130	3		20
Naphthalene	130		100		70-130	**26**	Q	20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	120		94		70-130	**24**	Q	20
1,2,4-Trichlorobenzene	110		95		70-130	15		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	108		114		56-162	5		20
p-Diethylbenzene	100		96		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1444523-3 WG1444523-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	99		100		59-134	1		20
trans-1,4-Dichloro-2-butene	98		98		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		103		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	106		105		70-130
Dibromofluoromethane	98		99		70-130

SEMIVOLATILES

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01
Client ID: MW_A_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 09:40
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/16/20 08:29
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 15:23

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	1.8	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	6.6		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	8.8	J	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	56		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	97		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	92		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01
Client ID: MW_A_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 09:40
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 17:39
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 16:39

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	0.72		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	2.7		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.30		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.16		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.15		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.21		ug/l	0.10	0.01	1
Acenaphthylene	0.80		ug/l	0.10	0.01	1
Anthracene	0.92		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.09	J	ug/l	0.10	0.01	1
Fluorene	0.88		ug/l	0.10	0.01	1
Phenanthrene	0.93		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.10	J	ug/l	0.10	0.01	1
Pyrene	2.0		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.79		ug/l	0.10	0.02	1
Pentachlorophenol	0.94		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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	71		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	87		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02
Client ID: MW_B_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 11:00
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/16/20 08:05
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 15:23

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	1.6	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	66		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	102		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	97		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02
Client ID: MW_B_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 11:00
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 18:00
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.09	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.07	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	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	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	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	0.03	J	ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.03	J	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	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.10	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	51		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	82		41-149

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03
Client ID: MW_X_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 10:15
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 12/16/20 07:18
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 15:23

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	1.7	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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	5.0		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	61		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	86		41-149

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03
Client ID: MW_X_20201209
Sample Location: YONKERS, NY

Date Collected: 12/09/20 10:15
Date Received: 12/09/20
Field Prep: Refer to COC

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 18:19
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 16:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.4		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.68		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	3.2		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.33		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.31		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.30		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.11		ug/l	0.10	0.01	1
Chrysene	0.23		ug/l	0.10	0.01	1
Acenaphthylene	0.81		ug/l	0.10	0.01	1
Anthracene	0.86		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.50		ug/l	0.10	0.01	1
Fluorene	0.70		ug/l	0.10	0.01	1
Phenanthrene	0.84		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.07	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.44		ug/l	0.10	0.01	1
Pyrene	1.8		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.81		ug/l	0.10	0.02	1
Pentachlorophenol	0.86		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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	67		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	96		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	99		10-120
4-Terphenyl-d14	81		41-149

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/16/20 04:33
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 03:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1445166-1					
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: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/16/20 04:33
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 03:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1445166-1					
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: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/16/20 04:33
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 03:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1445166-1					
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	51		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	75		41-149

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 11:25
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 03:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1445175-1					
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: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/16/20 11:25
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 12/15/20 03:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1445175-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	100		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1445166-2 WG1445166-3								
Acenaphthene	75		73		37-111	3		30
1,2,4-Trichlorobenzene	69		67		39-98	3		30
Hexachlorobenzene	80		78		40-140	3		30
Bis(2-chloroethyl)ether	66		68		40-140	3		30
2-Chloronaphthalene	76		75		40-140	1		30
1,2-Dichlorobenzene	64		63		40-140	2		30
1,3-Dichlorobenzene	61		60		40-140	2		30
1,4-Dichlorobenzene	63		61		36-97	3		30
3,3'-Dichlorobenzidine	55		54		40-140	2		30
2,4-Dinitrotoluene	80		80		48-143	0		30
2,6-Dinitrotoluene	82		82		40-140	0		30
Fluoranthene	79		77		40-140	3		30
4-Chlorophenyl phenyl ether	74		72		40-140	3		30
4-Bromophenyl phenyl ether	77		75		40-140	3		30
Bis(2-chloroisopropyl)ether	70		72		40-140	3		30
Bis(2-chloroethoxy)methane	70		72		40-140	3		30
Hexachlorobutadiene	66		62		40-140	6		30
Hexachlorocyclopentadiene	70		68		40-140	3		30
Hexachloroethane	59		57		40-140	3		30
Isophorone	67		70		40-140	4		30
Naphthalene	72		70		40-140	3		30
Nitrobenzene	76		75		40-140	1		30
NDPA/DPA	77		76		40-140	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1445166-2 WG1445166-3								
n-Nitrosodi-n-propylamine	70		73		29-132	4		30
Bis(2-ethylhexyl)phthalate	83		81		40-140	2		30
Butyl benzyl phthalate	80		80		40-140	0		30
Di-n-butylphthalate	75		75		40-140	0		30
Di-n-octylphthalate	84		82		40-140	2		30
Diethyl phthalate	73		73		40-140	0		30
Dimethyl phthalate	80		82		40-140	2		30
Benzo(a)anthracene	81		79		40-140	3		30
Benzo(a)pyrene	93		90		40-140	3		30
Benzo(b)fluoranthene	90		88		40-140	2		30
Benzo(k)fluoranthene	84		80		40-140	5		30
Chrysene	78		75		40-140	4		30
Acenaphthylene	83		83		45-123	0		30
Anthracene	82		79		40-140	4		30
Benzo(ghi)perylene	86		80		40-140	7		30
Fluorene	77		75		40-140	3		30
Phenanthrene	79		76		40-140	4		30
Dibenzo(a,h)anthracene	85		81		40-140	5		30
Indeno(1,2,3-cd)pyrene	84		79		40-140	6		30
Pyrene	76		74		26-127	3		30
Biphenyl	80		79		40-140	1		30
4-Chloroaniline	**37**	Q	45		40-140	20		30
2-Nitroaniline	81		84		52-143	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1445166-2 WG1445166-3								
3-Nitroaniline	57		58		25-145	2		30
4-Nitroaniline	68		70		51-143	3		30
Dibenzofuran	77		74		40-140	4		30
2-Methylnaphthalene	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	76		72		2-134	5		30
Acetophenone	69		71		39-129	3		30
2,4,6-Trichlorophenol	87		88		30-130	1		30
p-Chloro-m-cresol	80		81		23-97	1		30
2-Chlorophenol	72		72		27-123	0		30
2,4-Dichlorophenol	83		83		30-130	0		30
2,4-Dimethylphenol	45		42		30-130	7		30
2-Nitrophenol	96		98		30-130	2		30
4-Nitrophenol	64		71		10-80	10		30
2,4-Dinitrophenol	80		86		20-130	7		30
4,6-Dinitro-o-cresol	84		87		20-164	4		30
Pentachlorophenol	72		72		9-103	0		30
Phenol	55		56		12-110	2		30
2-Methylphenol	62		64		30-130	3		30
3-Methylphenol/4-Methylphenol	69		70		30-130	1		30
2,4,5-Trichlorophenol	85		86		30-130	1		30
Benzoic Acid	69		74		10-164	7		30
Benzyl Alcohol	67		70		26-116	4		30
Carbazole	81		79		55-144	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1445166-2 WG1445166-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		60		21-120
Phenol-d6	50		54		10-120
Nitrobenzene-d5	72		75		23-120
2-Fluorobiphenyl	79		80		15-120
2,4,6-Tribromophenol	90		89		10-120
4-Terphenyl-d14	74		76		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1445175-2 WG1445175-3								
Acenaphthene	71		72		40-140	1		40
2-Chloronaphthalene	85		87		40-140	2		40
Fluoranthene	98		97		40-140	1		40
Hexachlorobutadiene	67		70		40-140	4		40
Naphthalene	70		73		40-140	4		40
Benzo(a)anthracene	90		88		40-140	2		40
Benzo(a)pyrene	107		105		40-140	2		40
Benzo(b)fluoranthene	92		87		40-140	6		40
Benzo(k)fluoranthene	96		98		40-140	2		40
Chrysene	85		84		40-140	1		40
Acenaphthylene	85		93		40-140	9		40
Anthracene	85		86		40-140	1		40
Benzo(ghi)perylene	89		88		40-140	1		40
Fluorene	84		84		40-140	0		40
Phenanthrene	79		79		40-140	0		40
Dibenzo(a,h)anthracene	95		94		40-140	1		40
Indeno(1,2,3-cd)pyrene	94		93		40-140	1		40
Pyrene	99		98		40-140	1		40
2-Methylnaphthalene	80		82		40-140	2		40
Pentachlorophenol	136		127		40-140	7		40
Hexachlorobenzene	78		77		40-140	1		40
Hexachloroethane	56		60		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1445175-2 WG1445175-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		59		21-120
Phenol-d6	56		53		10-120
Nitrobenzene-d5	92		93		23-120
2-Fluorobiphenyl	85		83		15-120
2,4,6-Tribromophenol	118		108		10-120
4-Terphenyl-d14	102		97		41-149

METALS

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	1.44		mg/l	0.0100	0.00327	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Antimony, Total	0.00270	J	mg/l	0.00400	0.00042	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Arsenic, Total	0.03298		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Barium, Total	0.01219		mg/l	0.00050	0.00017	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Calcium, Total	24.2		mg/l	0.100	0.0394	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Chromium, Total	0.00427		mg/l	0.00100	0.00017	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00314		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Copper, Total	0.04001		mg/l	0.00100	0.00038	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Iron, Total	0.790		mg/l	0.0500	0.0191	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Lead, Total	0.00673		mg/l	0.00100	0.00034	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Magnesium, Total	0.194		mg/l	0.0700	0.0242	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Manganese, Total	0.01094		mg/l	0.00100	0.00044	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/15/20 22:10	12/16/20 12:01	EPA 7470A	1,7470A	VW
Nickel, Total	0.00582		mg/l	0.00200	0.00055	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Potassium, Total	18.5		mg/l	0.100	0.0309	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Selenium, Total	0.0110		mg/l	0.00500	0.00173	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Sodium, Total	174.		mg/l	0.100	0.0293	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Vanadium, Total	0.1777		mg/l	0.00500	0.00157	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Zinc, Total	0.00967	J	mg/l	0.01000	0.00341	1	12/15/20 21:20	12/16/20 10:31	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	1.12		mg/l	0.0100	0.00327	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00342	J	mg/l	0.00400	0.00042	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.03766		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00853		mg/l	0.00050	0.00017	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-01 Date Collected: 12/09/20 09:40

Client ID: MW_A_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Calcium, Dissolved	23.3		mg/l	0.100	0.0394	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00184		mg/l	0.00100	0.00017	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00290		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.03203		mg/l	0.00100	0.00038	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0757		mg/l	0.0500	0.0191	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	0.0253	J	mg/l	0.0700	0.0242	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/16/20 15:55	12/18/20 13:02	EPA 7470A	1,7470A	VW
Nickel, Dissolved	0.00525		mg/l	0.00200	0.00055	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Potassium, Dissolved	17.6		mg/l	0.100	0.0309	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.0110		mg/l	0.00500	0.00173	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Sodium, Dissolved	171.		mg/l	0.100	0.0293	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.1848		mg/l	0.00500	0.00157	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/16/20 15:36	12/18/20 13:33	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	0.0705		mg/l	0.0100	0.00327	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Antimony, Total	0.00079	J	mg/l	0.00400	0.00042	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00330		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Barium, Total	0.06450		mg/l	0.00050	0.00017	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Calcium, Total	65.2		mg/l	0.100	0.0394	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00048	J	mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Copper, Total	0.00320		mg/l	0.00100	0.00038	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Iron, Total	1.67		mg/l	0.0500	0.0191	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Lead, Total	0.00119		mg/l	0.00100	0.00034	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Magnesium, Total	17.5		mg/l	0.0700	0.0242	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Manganese, Total	0.2375		mg/l	0.00100	0.00044	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/15/20 22:10	12/16/20 12:04	EPA 7470A	1,7470A	VW
Nickel, Total	0.00099	J	mg/l	0.00200	0.00055	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Potassium, Total	38.8		mg/l	0.100	0.0309	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Sodium, Total	184.		mg/l	0.100	0.0293	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00188	J	mg/l	0.00500	0.00157	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	12/15/20 21:20	12/16/20 10:36	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00537	J	mg/l	0.0100	0.00327	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00128	J	mg/l	0.00400	0.00042	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00347		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05421		mg/l	0.00050	0.00017	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-02 Date Collected: 12/09/20 11:00

Client ID: MW_B_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Calcium, Dissolved	67.7		mg/l	0.100	0.0394	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00030	J	mg/l	0.00100	0.00017	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00038	J	mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00110		mg/l	0.00100	0.00038	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.852		mg/l	0.0500	0.0191	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	18.1		mg/l	0.0700	0.0242	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2375		mg/l	0.00100	0.00044	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/16/20 15:55	12/18/20 13:05	EPA 7470A	1,7470A	VW
Nickel, Dissolved	0.00113	J	mg/l	0.00200	0.00055	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Potassium, Dissolved	40.3		mg/l	0.100	0.0309	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Sodium, Dissolved	190.		mg/l	0.100	0.0293	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00184	J	mg/l	0.00500	0.00157	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/16/20 15:36	12/18/20 13:38	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	1.48		mg/l	0.0100	0.00327	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Antimony, Total	0.00265	J	mg/l	0.00400	0.00042	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Arsenic, Total	0.03474		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Barium, Total	0.01338		mg/l	0.00050	0.00017	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Calcium, Total	24.3		mg/l	0.100	0.0394	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Chromium, Total	0.00405		mg/l	0.00100	0.00017	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00334		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Copper, Total	0.04168		mg/l	0.00100	0.00038	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Iron, Total	0.995		mg/l	0.0500	0.0191	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Lead, Total	0.00948		mg/l	0.00100	0.00034	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Magnesium, Total	0.240		mg/l	0.0700	0.0242	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Manganese, Total	0.01475		mg/l	0.00100	0.00044	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/15/20 22:10	12/16/20 12:07	EPA 7470A	1,7470A	VW
Nickel, Total	0.00578		mg/l	0.00200	0.00055	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Potassium, Total	18.5		mg/l	0.100	0.0309	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Selenium, Total	0.0112		mg/l	0.00500	0.00173	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Sodium, Total	175.		mg/l	0.100	0.0293	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Vanadium, Total	0.1778		mg/l	0.00500	0.00157	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Zinc, Total	0.01355		mg/l	0.01000	0.00341	1	12/15/20 21:20	12/16/20 10:41	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	1.10		mg/l	0.0100	0.00327	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00299	J	mg/l	0.00400	0.00042	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.03612		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00899		mg/l	0.00050	0.00017	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

SAMPLE RESULTS

Lab ID: L2054986-03 Date Collected: 12/09/20 10:15

Client ID: MW_X_20201209 Date Received: 12/09/20

Sample Location: YONKERS, NY Field Prep: Refer to COC

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	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Calcium, Dissolved	22.4		mg/l	0.100	0.0394	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00173		mg/l	0.00100	0.00017	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00279		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.03212		mg/l	0.00100	0.00038	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0851		mg/l	0.0500	0.0191	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	0.0303	J	mg/l	0.0700	0.0242	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/16/20 15:55	12/18/20 13:09	EPA 7470A	1,7470A	VW
Nickel, Dissolved	0.00556		mg/l	0.00200	0.00055	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Potassium, Dissolved	17.1		mg/l	0.100	0.0309	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.0109		mg/l	0.00500	0.00173	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Sodium, Dissolved	167.		mg/l	0.100	0.0293	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.1781		mg/l	0.00500	0.00157	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/16/20 15:36	12/18/20 13:43	EPA 3005A	1,6020B	AM

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

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): 01-03 Batch: WG1445425-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Thallium, Total	ND		mg/l	0.00100	0.00014	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	12/15/20 21:20	12/16/20 08:07	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	12/15/20 21:20	12/16/20 08:07	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): 01-03 Batch: WG1445426-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	12/15/20 22:10	12/16/20 11:24	1,7470A	VW

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

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): 01-03 Batch: WG1445543-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00100	0.00014	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	12/16/20 15:36	12/18/20 12:03	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Project Name: AVALON BAY SUN SITES-PCE **Lab Number:** L2054986

Project Number: 180132 **Report Date:** 12/18/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1445544-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	12/16/20 15:55	12/18/20 12:29	1,7470A	VW

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445425-2								
Aluminum, Total	98		-		80-120	-		
Antimony, Total	89		-		80-120	-		
Arsenic, Total	103		-		80-120	-		
Barium, Total	101		-		80-120	-		
Beryllium, Total	113		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Calcium, Total	99		-		80-120	-		
Chromium, Total	95		-		80-120	-		
Cobalt, Total	99		-		80-120	-		
Copper, Total	100		-		80-120	-		
Iron, Total	95		-		80-120	-		
Lead, Total	100		-		80-120	-		
Magnesium, Total	99		-		80-120	-		
Manganese, Total	98		-		80-120	-		
Nickel, Total	96		-		80-120	-		
Potassium, Total	99		-		80-120	-		
Selenium, Total	103		-		80-120	-		
Silver, Total	104		-		80-120	-		
Sodium, Total	99		-		80-120	-		
Thallium, Total	97		-		80-120	-		
Vanadium, Total	96		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445425-2					
Zinc, Total	106	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445426-2					
Mercury, Total	86	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445543-2					
Aluminum, Dissolved	108	-	80-120	-	
Antimony, Dissolved	95	-	80-120	-	
Arsenic, Dissolved	115	-	80-120	-	
Barium, Dissolved	107	-	80-120	-	
Beryllium, Dissolved	105	-	80-120	-	
Cadmium, Dissolved	113	-	80-120	-	
Calcium, Dissolved	108	-	80-120	-	
Chromium, Dissolved	105	-	80-120	-	
Cobalt, Dissolved	105	-	80-120	-	
Copper, Dissolved	107	-	80-120	-	
Iron, Dissolved	104	-	80-120	-	
Lead, Dissolved	112	-	80-120	-	
Magnesium, Dissolved	108	-	80-120	-	
Manganese, Dissolved	104	-	80-120	-	
Nickel, Dissolved	103	-	80-120	-	
Potassium, Dissolved	105	-	80-120	-	
Selenium, Dissolved	112	-	80-120	-	
Silver, Dissolved	109	-	80-120	-	
Sodium, Dissolved	104	-	80-120	-	
Thallium, Dissolved	108	-	80-120	-	
Vanadium, Dissolved	104	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445543-2					
Zinc, Dissolved	113	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1445544-2					
Mercury, Dissolved	95	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445425-3 QC Sample: L2055944-14 Client ID: MS Sample												
Aluminum, Total	ND	2	1.99	100		-	-		75-125	-		20
Antimony, Total	ND	0.5	0.4603	92		-	-		75-125	-		20
Arsenic, Total	ND	0.12	0.1316	110		-	-		75-125	-		20
Barium, Total	ND	2	2.122	106		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05510	110		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05672	111		-	-		75-125	-		20
Calcium, Total	ND	10	10.0	100		-	-		75-125	-		20
Chromium, Total	ND	0.2	0.1912	96		-	-		75-125	-		20
Cobalt, Total	ND	0.5	0.5084	102		-	-		75-125	-		20
Copper, Total	ND	0.25	0.2561	102		-	-		75-125	-		20
Iron, Total	ND	1	1.11	111		-	-		75-125	-		20
Lead, Total	ND	0.51	0.5371	105		-	-		75-125	-		20
Magnesium, Total	ND	10	9.83	98		-	-		75-125	-		20
Manganese, Total	0.00131	0.5	0.4938	98		-	-		75-125	-		20
Nickel, Total	ND	0.5	0.4921	98		-	-		75-125	-		20
Potassium, Total	ND	10	10.1	101		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.136	113		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05353	107		-	-		75-125	-		20
Sodium, Total	ND	10	9.92	99		-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1295	108		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.4885	98		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445425-3 QC Sample: L2055944-14 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5478	110	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445426-3 QC Sample: L2055944-14 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00457	92	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132
Lab Number: L2054986
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445543-3 QC Sample: L2054985-01 Client ID: MS Sample										
Aluminum, Dissolved	ND	2	2.12	106		-	-	75-125	-	20
Antimony, Dissolved	0.00282J	0.5	0.6516	**130**	Q	-	-	75-125	-	20
Arsenic, Dissolved	0.00202J	0.12	0.1468	122		-	-	75-125	-	20
Barium, Dissolved	0.05913	2	2.148	104		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05728	114		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05357	105		-	-	75-125	-	20
Calcium, Dissolved	101.	10	123	**220**	Q	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.1993	100		-	-	75-125	-	20
Cobalt, Dissolved	ND	0.5	0.5156	103		-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2497	100		-	-	75-125	-	20
Iron, Dissolved	ND	1	1.12	112		-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5933	116		-	-	75-125	-	20
Magnesium, Dissolved	192.	10	218	**260**	Q	-	-	75-125	-	20
Manganese, Dissolved	0.03060	0.5	0.5319	100		-	-	75-125	-	20
Nickel, Dissolved	ND	0.5	0.4757	95		-	-	75-125	-	20
Potassium, Dissolved	63.8	10	76.8	**130**	Q	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.0846J	**0**	Q	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05215	104		-	-	75-125	-	20
Sodium, Dissolved	1780	10	1800	**200**	Q	-	-	75-125	-	20
Thallium, Dissolved	0.00141J	0.12	0.1374	114		-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4997	100		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

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): 01-03 QC Batch ID: WG1445543-3 QC Sample: L2054985-01 Client ID: MS Sample									
Zinc, Dissolved	ND	0.5	0.4896	98	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445544-3 QC Sample: L2054985-01 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00481	96	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445425-4 QC Sample: L2055944-14 Client ID: DUP Sample						
Aluminum, Total	ND	ND	mg/l	NC		20
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	ND	ND	mg/l	NC		20
Barium, Total	ND	ND	mg/l	NC		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Calcium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Cobalt, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Iron, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Magnesium, Total	ND	ND	mg/l	NC		20
Manganese, Total	0.00131	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Potassium, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445425-4 QC Sample: L2055944-14 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445426-4 QC Sample: L2055944-14 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445543-4 QC Sample: L2054985-01 Client ID: DUP Sample					
Aluminum, Dissolved	ND	ND	mg/l	NC	20
Antimony, Dissolved	0.00282J	0.00497J	mg/l	NC	20
Arsenic, Dissolved	0.00202J	0.00258	mg/l	NC	20
Barium, Dissolved	0.05913	0.06294	mg/l	6	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	101.	110	mg/l	9	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Cobalt, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Iron, Dissolved	ND	0.146J	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	192.	211	mg/l	9	20
Manganese, Dissolved	0.03060	0.03511	mg/l	14	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Potassium, Dissolved	63.8	69.3	mg/l	8	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	1780	1920	mg/l	8	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: AVALON BAY SUN SITES-PCE

Project Number: 180132

Lab Number: L2054986

Report Date: 12/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445543-4 QC Sample: L2054985-01 Client ID: DUP Sample					
Thallium, Dissolved	0.00141J	0.00441J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1445544-4 QC Sample: L2054985-01 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2054986-01A	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-01B	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-01C	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-01D	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		SE-6020S(180),K-6020S(180),CU-6020S(180),V-6020S(180),MN-6020S(180),MG-6020S(180),CO-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),CA-6020S(180),FE-6020S(180),TL-6020S(180),BA-6020S(180),NA-6020S(180),PB-6020S(180),NI-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2054986-01E	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		BA-6020T(180),SE-6020T(180),TL-6020T(180),FE-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),CD-6020T(180),MG-6020T(180),AL-6020T(180),HG-T(28),CO-6020T(180)
L2054986-01F	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054986-01G	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054986-02A	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-02B	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-02C	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2054986-02D	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		K-6020S(180),SE-6020S(180),V-6020S(180),CU-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),BA-6020S(180),PB-6020S(180),NI-6020S(180),NA-6020S(180),TL-6020S(180),AS-6020S(180),AG-6020S(180),SB-6020S(180),AL-6020S(180),HG-S(28),CD-6020S(180)
L2054986-02E	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		TL-6020T(180),SE-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),V-6020T(180),SB-6020T(180),AS-6020T(180),MG-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),CO-6020T(180)
L2054986-02F	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054986-02G	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054986-03A	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-03B	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-03C	Vial HCl preserved	B	NA		2.8	Y	Absent		NYTCL-8260(14)
L2054986-03D	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		SE-6020S(180),K-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),MG-6020S(180),ZN-6020S(180),BE-6020S(180),CO-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),NA-6020S(180),PB-6020S(180),BA-6020S(180),TL-6020S(180),NI-6020S(180),SB-6020S(180),AS-6020S(180),AG-6020S(180),HG-S(28),AL-6020S(180),CD-6020S(180)
L2054986-03E	Plastic 250ml HNO3 preserved	B	<2	<2	2.8	Y	Absent		FE-6020T(180),SE-6020T(180),TL-6020T(180),BA-6020T(180),K-6020T(180),CA-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),HG-T(28),MG-6020T(180),AG-6020T(180),CD-6020T(180),AL-6020T(180),CO-6020T(180)
L2054986-03F	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2054986-03G	Amber 250ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

*Values in parentheses indicate holding time in days

Project Name: AVALON BAY SUN SITES-PCE
Project Number: 180132

Lab Number: L2054986
Report Date: 12/18/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)

*Values in parentheses indicate holding time in days

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

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.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

Footnotes

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

Data Qualifiers

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.

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, Naphthalene
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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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: 12/10/20

ALPHA Job #: L2054986

Client Information

Client: AKRF, Inc
Address: 34 South Broadway
Suite 401 White Plains, NY
Phone: 914 922 2387
Fax:
Email: gmchugh@akrf.com

Project Information

Project Name: Arnolan Bay Sun Site - PCE
Project Location: Yonkers, NY
Project #: 180132
(Use Project name as Project #)
Project Manager: Patrick McHugh
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please Add Sgreen@akrf.com on all correspondence / Category B Deliverables

Please specify Metals or TAL.

Deliverables

☐ ASP-A ☑ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☑ Other EQUIS EDP

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:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs	SVOCs (1,4-Dioxane)	metals (Total/Dissolved)						Sample Specific Comments	Total Bottle
54986-01	MW-A_20201209	12/9/20	0940	GW	TG	X	X	X							
-02	MW-B_20201209	↓	1102	↓	↓	X	X	X							
-03	MW-X_20201209	↓	1015	↓	↓	X	X	X							

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

Container Type: V A P
Preservative: B A C

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

Relinquished By:	Date/Time	Received By:	Date/Time
Tom Gordon AKRF	12/9/20	ROEN AAL Roen	12/9/20 1530
Roen AAL	12/9/20 1745	AAL	12/9/20 2005
AAL	12/10/20 0015		12/10/20 0015

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:	L2108436
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVB-PCE
Project Number:	180132-2005
Report Date:	03/02/21

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2108436
Report Date: 03/02/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2108436-01	MW-D_20210222	WATER	YONKERS, NY	02/22/21 09:15	02/22/21
L2108436-02	MW-X_20210222	WATER	YONKERS, NY	02/22/21 00:00	02/22/21
L2108436-03	FB_20210222	WATER	YONKERS, NY	02/22/21 10:00	02/22/21
L2108436-04	MW-C_20210222	WATER	YONKERS, NY	02/22/21 10:35	02/22/21
L2108436-05	MW-B_20210222	WATER	YONKERS, NY	02/22/21 11:40	02/22/21

Project Name:	AVB-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

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-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

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: 03/02/21

ORGANICS

SEMIVOLATILES

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2108436
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108436-01
Client ID: MW-D_20210222
Sample Location: YONKERS, NY

Date Collected: 02/22/21 09:15
Date Received: 02/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/01/21 07:27
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	228000		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2108436
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108436-02
Client ID: MW-X_20210222
Sample Location: YONKERS, NY

Date Collected: 02/22/21 00:00
Date Received: 02/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/02/21 06:46
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	225000		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		15-110

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2108436
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108436-03
Client ID: FB_20210222
Sample Location: YONKERS, NY

Date Collected: 02/22/21 10:00
Date Received: 02/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/01/21 13:15
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	139	31.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2108436
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108436-04
Client ID: MW-C_20210222
Sample Location: YONKERS, NY

Date Collected: 02/22/21 10:35
Date Received: 02/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/01/21 14:01
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	205.		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	45		15-110

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2108436
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108436-05 D
Client ID: MW-B_20210222
Sample Location: YONKERS, NY

Date Collected: 02/22/21 11:40
Date Received: 02/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/01/21 16:52
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	703000		ng/l	750	170.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2108436
Report Date: 03/02/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 02/28/21 18:50
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 02/26/21 08:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-05 Batch: WG1468520-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	45		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVB-PCE

Project Number: 180132-2005

Lab Number: L2108436

Report Date: 03/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-05		Batch: WG1468520-2 WG1468520-3					
1,4-Dioxane	120		125		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	38		42		15-110

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2108436
Report Date: 03/02/21

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(*)
L2108436-01A	Amber 250ml unpreserved	A	11	11	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-01B	Amber 250ml unpreserved	A	11	11	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-02A	Amber 250ml unpreserved	A	11	11	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-03A	Amber 250ml unpreserved	A	6	6	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-03B	Amber 250ml unpreserved	A	6	6	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-04A	Amber 250ml unpreserved	A	6	6	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-04B	Amber 250ml unpreserved	A	6	6	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-05A	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2108436-05B	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	AVB-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

Footnotes

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

Data Qualifiers

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-PCE	**Lab Number:**	L2108436
Project Number:	180132-2005	**Report Date:**	03/02/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, Naphthalene
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: 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, SM9222D.**

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, EPA 537.1.

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.

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

NEW JERSEY CHAIN OF CUSTODY

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: 2/22/21

ALPHA Job #: L2108436

Client Information
Client: AKRF INC
Address: 440 PARK AVES NY NY
Phone: pmchugh@akrfcom
Fax:
Email:

Project Information
Project Name: AVB-PLE
Project Location: YONKERS NY
Project #: 130132-2005
(Use Project name as Project #)
Project Manager: PAT MCHUGH
ALPHAQuote #:

Turn-Around Time
Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

These samples have been previously analyzed by Alpha [ ]

For EPH, selection is REQUIRED:
[ ] Category 1
[ ] Category 2

For VOC, selection is REQUIRED:
[ ] 1,4-Dioxane
[ ] 8011

Other project specific requirements/comments:
EMERGING CONTAMINANTS

Please specify Metals or TAL.

Deliverables
[ ] NJ Full / Reduced
[ ] EQuIS (1 File) [X] EQuIS (4 File)
[ ] Other

Regulatory Requirement
[ ] SRS Residential/Non Residential
[ ] SRS Impact to Groundwater
[ ] NJ Ground Water Quality Standards
[ ] NJ IGW SPLP Leachate Criteria
[ ] Other

Billing Information
[ ] Same as Client Info
PO #

Site Information
Is this site impacted by Petroleum? Yes [ ]
Petroleum Product:

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

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE	Total Bottles	Sample Specific Comments
08436-01	MW-D_20210222	2/22/21	915	WATER	SJ	X		
02	MW-X_20210222	"	0000	"	"	X		
03	FB_20210222	"	1000	"	"	X		
04	MW-C_20210222	"	1035	"	"	X		
05	MW-B_20210222	"	1140	"	"	X		

Container Type
Preservative

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

Relinquished By:	Date/Time	Received By:	Date/Time
	2/22/21 14:30		2/22/21 14:30
Paul Mazzella	2/22/21 16:10	Paul Mazzella	2/22/21 16:55
	2/22 23:00		2/22 23:00

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: 01-14 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2109041
Client:	AKRF, Inc. 34 South Broadway Suite 401 White Plains, NY 10601
ATTN:	Patrick McHugh
Phone:	(914) 922-2387
Project Name:	AVB-PCE
Project Number:	180132-2005
Report Date:	03/04/21

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2109041
Report Date: 03/04/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2109041-01	MW-A_20210224	WATER	YONKERS, NY	02/24/21 13:55	02/24/21

Project Name:	AVB-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

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-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

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: 03/04/21

ORGANICS

SEMIVOLATILES

Project Name: AVB-PCE
Project Number: 180132-2005
Lab Number: L2109041
Report Date: 03/04/21

SAMPLE RESULTS

Lab ID: L2109041-01
Client ID: MW-A_20210224
Sample Location: YONKERS, NY

Date Collected: 02/24/21 13:55
Date Received: 02/24/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/03/21 23:58
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 03/01/21 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	4030		ng/l	156	35.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2109041
Report Date: 03/04/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/03/21 19:55
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 03/01/21 13:30

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01 Batch: WG1469331-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	47		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: AVB-PCE

Project Number: 180132-2005

Lab Number: L2109041

Report Date: 03/04/21

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 Batch: WG1469331-2 WG1469331-3								
1,4-Dioxane	102		104		40-140	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	45		45		15-110

Project Name: AVB-PCE
Project Number: 180132-2005

Lab Number: L2109041
Report Date: 03/04/21

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(*)
L2109041-01A	Amber 250ml unpreserved	A	10	10	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2109041-01B	Amber 250ml unpreserved	A	10	10	3.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	AVB-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

Footnotes

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.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

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.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	AVB-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

Data Qualifiers

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.

Project Name:	AVB-PCE	**Lab Number:**	L2109041
Project Number:	180132-2005	**Report Date:**	03/04/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

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, Naphthalene
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: 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, SM9222D.**

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, EPA 537.1.

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 | of |

Date Rec'd in Lab: 2/25/21

ALPHA Job #: L2159041

Client Information
Client: AKRF INC.
Address: 440 PARK AVE S 7TH FL NY NY
Phone:
Fax:
Email: [illegible]@akrf.com

Project Information
Project Name: AMB-FUEL
Project Location: VALHALLA NY
Project #: 180132-2005
(Use Project name as Project #) ☐
Project Manager: [illegible]
ALPHAQuote #:

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
EMERGING CONTAMINANTS

Please specify Metals or TAL.

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:

ANALYSIS
1,4 DIOXANE

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	1,4 DIOXANE	Sample Specific Comments
0041 - 01	MW-A-20210224	2/24/21	1355	WATER	CB	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

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.)

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	2/24/21 1600	[illegible]	2/24/21 1600
[illegible]	2/24/21 1835	[illegible]	2/24/21 2000
[illegible]	2/25/21 0025	[illegible]	2/25/21 0025
Wendy Manning	2/25/21 4:00	[illegible]	5/25/21 0410
[illegible]	5/25/21 0545	[illegible]	2/25/21 0545

ALPHA Rev 10 - 25 HC (rev. 30-Sept-2013)

ATTACHMENT C
DATA USABILITY SUMMARY REPORTS (DUSRS)

L.A.B. Validation Corp, 14 West Point Drive, East Northport, NY 11731

DATA USABILITY SUMMARY REPORT – DUSR
DATA VALIDATION SUMMARY

ORGANIC/INORGANIC ANALYSES
VOLATILES BY GC/MS
SEMIVOLATILES BY GC/MS
WITH SELECT ANALYTES BY SELECTIVE ION MONITORING (SIM) GC/MS
AND TAL (23) TOTAL AND DISSOLVED METALS BY ICPMS/CV

For Groundwater Samples Collected
December 08, 2020 and December 09, 2020
Avalon Bay Sun Sites – Polychrome East
Yonkers, New York
Collected by AKRF, Inc.
Project Number: 180132

SAMPLE DELIVERY GROUP NUMBERs:
L2054742 and L2054986
BY ALPHA ANALYTICAL (ELAP #11148)

SUBMITTED TO:

Mr. Patrick McHugh
AKRF, Inc.
34 South Broadway, Suite 401
White Plains, NY 10601

Cc: Mr. Steve Grens/AKRF, Inc.

January 12, 2021

PREPARED BY:
Lori A. Beyer/President
L.A.B. Validation Corp.
14 West Point Drive
East Northport, NY 11731

(516) 523-7891; email LABValidation@aol.com

Avalon Bay Sun Sites – Polychrome East, Yonkers, NY
Data Usability Summary Report (Data Validation):
December 2020 Groundwater Sampling
Volatiles, Semivolatiles, and TAL Total and Dissolved Metals

Table of Contents:

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Data Qualifier Definitions
Sample Receipt
1.0 Volatile Organics by GC/MS SW846 Method 8260C
- 1.1 Holding Time
- 1.2 System Monitoring Compound (Surrogate) Recovery
- 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 1.4 Laboratory Control Sample/Laboratory Control Duplicate
- 1.5 Blank Contamination
- 1.6 GC/MS Instrument Performance Check (Tuning)
- 1.7 Initial and Continuing Calibrations
- 1.8 Internal Standards
- 1.9 Field Duplicates
- 1.10 Target Compound List Identification
- 1.11 Compound Quantification and Reported Detection Limits
- 1.12 Overall System Performance

2.0 Semivolatile Organics by GC/MS SW846 Method 8270D
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- 2.2 Surrogate Recovery
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- 2.4 Laboratory Control Sample/Laboratory Control Duplicate
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- 2.6 GC/MS Instrument Performance Check (Tuning)
- 2.7 Initial and Continuing Calibrations
- 2.8 Internal Standards
- 2.9 Field Duplicates
- 2.10 Target Compound List Identification
- 2.11 Compound Quantification and Reported Detection Limits
- 2.12 Overall System Performance

3.0 TAL (23) Total and Dissolved Metals by ICPMS/Cold Vapor SW846 Methods 6020B/7470A
- 3.1 Holding Times
- 3.2 Calibration (Initial and Continuing Calibration Verifications)
- 3.3 Blanks
- 3.4 Spiked Sample Recovery
- 3.5 Laboratory/Field Duplicates
- 3.6 Laboratory Control Sample
- 3.7 Interference Check Sample
- 3.8 ICPMS Serial Dilution
- 3.9 Sample Results Verification
- 3.10 Overall Assessment of Data

Appendices:
A. Chain of Custody Documents and Sample Receipt Checklists
B. Case Narratives
C. Data Summary Form Is with Qualifications

Introduction:
A validation was performed on groundwater samples and the associated quality control (MS/MSD/Field Duplicate/Field Blank/Trip Blank) for organic/inorganic analysis for samples collected under chain of custody documentation by AKRF, Inc. and submitted to Alpha Analytical for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below with corresponding required analysis. The table below lists required parameters for each sample location. The samples were analyzed by Alpha Analytical, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed.

The analytical testing and data review consisted of the target compound analyte lists for Volatile Organics, Semivolatile Organics and Total and Dissolved TAL (23) Metals. The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic and Inorganic Data Review and EPA Region II SOPs for 8260, 8270, and Inorganics (Metals) and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

Sample ID	Lab ID	Analysis	Date Collected/Received
MW-D_20201208 [Plus, MS/MSD]	L2054742-01	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/08/2020
MW-C_20201208	L2054742-02	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/08/2020
Field Blank_20201208	L2054742-03	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/08/2020
Trip Blank_20201208	L2054742-04	Volatiles	12/08/2020
MW-A_20201209	L2054986-01	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/09/2020
MW-B_20201209	L2054986-02	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/09/2020
MW-X_20201209 [Field Duplicate of MW-A_20201209]	L2054986-03	Volatiles, Semivolatiles, Total and Dissolved TAL (23) Metals	12/09/2020

Data Qualifier Definitions:
The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

J+ - The result is an estimated quantity, but the result may be biased high. (Equis qualified, JK)

J- - The result is an estimated quantity, but the result may be biased low. (Equis qualified, JL)

D - Analyte concentration is from diluted analysis.

Sample Receipt:
The Chain of Custody documents indicates that the samples were received at Alpha Analytical via laboratory courier upon completion of the sampling events. Sample login notes were generated. The cooler temperature for sample receipts was recorded upon receipt at Alpha and determined to be acceptable (< 6 degrees C). The actual temperatures are documented on the sample receipt checklists provided in Appendix A of this report.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary Form I's included in Appendix C and Equis deliverable includes all usable (qualified) and unusable (rejected) results for the samples identified above. The Form I's summarize the detailed narrative section of the report. All data validation qualifications have been reported on the Form I's and onto the excel spreadsheet for ease of review and verification.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

1.0 Volatile Organics by GC/MS SW846 Method 8260C
The following method criteria were reviewed: holding times, SMCs, MS, MSD, Laboratory Spiked Blanks, Field Duplicates, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results are valid and useable except for non-detects in all samples for 1,4-Dioxane which have been rejected in all samples due to low calibration response as noted within the following text:

1.1 Holding Time
The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples pertaining to these SDGs were analyzed within the Method required holding times as well as the technical holding times for data validation of 14 days for HCL preserved vials.

1.1 System Monitoring Compound (Surrogate) Recovery
All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene (BFB) were found to be within acceptable limits for surrogate compounds.

1.2 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)
The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

MS/MSD analysis on MW-D yielded low Bromomethane (26%/35%) in the MS and MSD. RPD (30%) also exceeded laboratory limits of 20%. Non-detects in the parent sample have been qualified, "UJ." The National Functional Guidelines provide and allow for flexibility when qualifying the parent sample based on MS/MSD data.

1.4 Laboratory Control Sample/Laboratory Control Duplicate
The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

Acceptable LCS/LCS Duplicate was analyzed with each analytical batch. Recovery and RPD met acceptance criteria for all analytes with exceptions noted below:

LCS/LCS Duplicate associated with Trip Blank_20201208, Field Blank_20201208, MW-C_20201208 and MW-D_20201208 yielded Bromomethane (32%/33%) below in-house limits. Non-detects have been qualified, "UJ." Additionally, RPD for 4-Methyl-2-Pentanone (21%), 2-Hexanone(26%) and trans-1,4-Dichloro-2-butene (21%) was outside 20% laboratory criteria. No qualifiers were applied based on these reported outliers.

LCS/LCS Duplicate associated with MW-A_20201209, MW-B_20201209 and MW-X_20201209 yielded acceptable recovery for all spiked compounds. RPD for Naphthalene (26%) and 1,2,3-Trichlorobenzene (24%) were outside laboratory limits. Data was not qualified based on these outliers.

No additional qualifiers were applied based on LCS/LCS Duplicate data.

1.5 Blank Contamination
Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>/= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	</= CRQL*	Report CRQL value with a U
		>/=CRQL* and </= blank concentration	Report blank value for sample concentration with a U
		>/= CRQL* and > blank concentration	No qualification required
	=CRQL*	</= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
	Gross Contamination**	Detects	Report blank value for sample concentration with a U

*2x the CRQL for methylene chloride, 2-butanone, and acetone.
**Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L.

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Method blanks associated with MW-A_20201209, MW-B_20201209 and MW-X_20201209 yielded Acetone at 1.5 ug/L. The laboratory reported results in MW-B_20201209 was negated, "U." The reported concentrations of this common lab contaminant in MW-A_20201209 (9.4 ug/L) and MW-X_20201209 (9.3 ug/L) have been qualified, "J+."

B) **Field Blank Contamination:**

No target analytes were detected in Field Blank_20201208.

C) **Trip Blank Contamination:**

No target analytes were detected in Trip Blank_20201208.

D) **Storage Blank Contamination**

Storage blanks were not submitted. It should be noted that storage blanks are not required for SW846 Method 8260C.

1.6 GC/MS Instrument Performance Check (Tuning)

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial calibration verifications were acceptable.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R". Method 8260C allows for a minimum response factor of 0.1 for Acetone and 2-Butanone. Validation criteria allows response factor to be /=>0.01 for poor responders (Acetone, MEK, Carbon Disulfide, Chloroethane, Chloromethane, Cyclohexane, 1,2-Dibromoethane, Dichlorodifluoromethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane, 1,2-Dibromo-3-Chloropropane, Isopropyl benzene, Methyl Acetate, Methylene Chloride, Methylcyclohexane, MTBE, trans-1,2-Dichloroethene, 4-Methyl-2-Pentanone, 2-Hexanone, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane.

Response factors for the target analytes reported were found to be within acceptable limits (>/=0.05) and (>/= 0.01 for poor responders) and minimum response criteria in Table 4 of Method 8260C, for the initial and continuing calibrations for all reported analytes except for 1,4-

Dioxane (0.001) in the initial and continuing calibrations. Non-detects for 1,4-Dioxane must be considered unreliable and have been rejected in the Volatile analysis. The reported concentration of 1,4-Dioxane in MW-B_20201009 has been qualified, "JK" biased high due to low calibration response.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >20% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Poor responders must be </= 40%. ICV also met acceptance criteria.

*Method 8260C allows for several analytes to be outside requirements due to the large number of compounds.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) and (40% for poor responders) for all reported compounds with exceptions noted below:

CCAL Gonzo 12/11/20 – Dichlorodifluoromethane – 41.7%, Vinyl Chloride – 32.1%, trans-1,4-Dichloro-2-butene – 26.0%; "UJ" non-detects in Trip Blank_20201208, Field Blank_20201208, MW-C_20201208 and MW-D_20201208.

CCAL VOA105 12/12/20 – Dichlorodifluoromethane – 42.0%, Bromomethane – 31.2%, Acrylonitrile – 22.9%, Vinyl Acetate – 28.4%, 1,2,3-Trichlorobenzene – 21.4%; "J/UJ" results for MW-A_20201209, MW-B_20201209 and MW-X_20201209.

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using
that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

Samples were spiked with the internal standards Fluorobenzene, Chlorobenzene-d5 and 1,4-Dichlorobenzene-D4 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with these SDGs.

1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD is 25% for aqueous samples.

Field Duplicate analysis of MW-A_20201209 as MW-X_20201209 yielded acceptable precision for all detected analytes.

1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards per SW846 and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Groundwater samples were analyzed undiluted except for MW-D_20201208 (1:10). Review of the raw data supports the dilution that was performed due to elevated concentration of Naphthalene (1400 ug/L). This compound is also a target analyte for Semivolatile analysis. Results for SIM analysis of Naphthalene yielded comparable concentration in this location (1100 ug/L). There is potential that lower-level detections were lost in dilution. Analysis is acceptable.

1.12 Overall System Performance

Good resolution and chromatographic performance were observed.

2.0 Semivolatile Organics by GC/MS SW846 Method 8270D

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS, Field Duplicate, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits, and overall system performance. The Semivolatile results are valid and usable except for non-detects for 3,3'-Dichlorobenzidien, 3-Nitroanline and 4-Nitrophenol in MW-D_20201208 due to non-recoverable MS/MSD results as noted within the following text:

2.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples were initially extracted and analyzed within the method required holding times and the technical holding times (7 days from collection to extraction for aqueous samples and 40 days from extraction to analysis) required for data validation. Field Blank_20201208 was reextracted outside holding time due to Naphthalene detection above the reporting limit. The reextracted data is provided in the lab report and has been rejected. The initial data for Field Blank_20201208 should be utilized for comparison to field samples.

2.2 Surrogate Recovery
All samples are spiked with surrogate compounds prior to sample preparation/extraction to evaluate overall laboratory performance and efficiency of the analytical technique. Additionally, the sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the evaluation of the data is dependent upon reextraction and/or reanalysis to confirm/negate laboratory error or matrix related problems. Discussion of surrogate recoveries that fell outside (above/below) QC guidelines is itemized below:

Samples were spiked with six (6) surrogate standards at the sample extraction portion of analysis. Method allows for one (1) base neutral and one (1) acid recovery to be outside acceptance limits without requiring reextraction/reanalysis. The laboratory is compliant with all surrogate standards meeting acceptance criteria. For validation, recovery values <10% require analytes from that fraction be rejected, "R." 2,4,6-Tribromophenol recovered above limits at 134% in Field Blank_20201208 and the LCS (147%)/LCS Duplicate (131%). Associated sample results are not impacted. Diluted reanalysis of MW-D_20201208 resulted in loss of surrogate recovery. Data was not qualified in this case.

2.3 Matrix Spikes (MS)/Matrix Spike Duplicates (MSD)
The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

MS/MSD analysis on MW-D_20201208 yielded non-recoverable 3,3'-Dichlorobenzidine, 3-Nitroanline and 4-Nitrophenol. Non-detects in the parent sample have been rejected, "R." 4-Chloro-3-methylphenol recovered above limits at 100% in both the MS and MSD. Elevated Benzyl Alcohol (140%/130%) was also obtained. Data was not qualified based on high recovery where ethe analytes are not detected in the parent sample. Carbazole, 2,4-Dimethylphenol and Phenol also recovered above limits due to high parent concentration relative to spike amount. Data was not qualified based on professional judgment and acceptable LCS recovery. RPD met acceptance criteria for all spiked compounds.

The National Functional Guidelines provide and allow for flexibility when qualifying the parent sample based on MS/MSD data.

2.4 Laboratory Control Sample/Laboratory Control Duplicate
The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/LCS Duplicate recovery and RPD met acceptance criteria for all spike analytes except for 4-Chloroaniline (37%) in the LCS associated with MW-X_20201209, MW-B_20201209 and MW-A_20201209. Non-detects in these samples have been qualified, "UJ."

2.5 Method Blanks
Quality assurance (QA) blanks, i.e., method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field

activity. Method blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Phthalates (common laboratory contaminants)	Sample Conc. is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value
Other Contaminants	Sample Conc. is >CRQL, but </=1x blank value	Sample Conc. Is <CRQL and </=1x blank value	Sample Conc. is >CRQL and >1x blank value

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

No target analytes were detected in the method blanks.

B) **Field Blank Contamination:**

No target analytes were detected in the full scan analysis of Field Blank_20201208. SIM analysis yielded Naphthalene (0.14 ug/L), Phenanthrene (0.02 ug/L) and 2-Methylnaphthalene (0.04 ug/L). Since Naphthalene detection is above the SIM laboratory reporting limit, this sample was reextracted. Both sets of SIM Field Blank results were provided in the lab report. Since holding time had expired, the reextracted results have been rejected, "R." Sample results were evaluated to the initial Field Blank results. The laboratory reported concentrations in MW-D_20201208 must be considered real. The reported results for Naphthalene (0.07 ug/L) in MW-C_20201208 has been negated, "U."

2.6 GC/MS Instrument Performance Check (Tuning)

Tuning and performance criteria are established to ensure adequate mass resolution proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for semivolatile organics is decafluorotriphenylphosphine (DFTPP).

Instrument performance was generated within acceptable limits and frequency (12 hours) for decafluorotriphenylphosphine (DFTPP) for all analyses. DDT breakdown, tailing factor and resolution check met acceptance criteria.

2.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

Response factors for the target analytes reported were found to be within acceptable limits (>/=0.05), for the initial (average RRF) and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Due to the large number of analytes in this method, it is expected for some analytes to fall outside acceptance criteria and the calibration is still considered valid. Acceptable Initial Calibration Verifications were performed (<30%).

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) for all reported compounds except for:

CCAL SV125 12/16/20 – 4,6-Dinitro-2-methylphenol – 28.2%; "UJ" non-detects in MW-C_20201208 and MW-D_20201208.

CCAL SV125 12/17/20 – 4,6-Dinitro-2-methylphenol – 31.9%; "UJ" non-detects in Field Blank_20201208.

CCAL SV106 12/16/20 – 2-Nitrophenol – 20.9%, Benzoic Acid – 22.6%; "J/UJ" results in MW-X_20201209, MW-B_20201209 and MW-A_20201209.

CCAL SV128 12/16/20 (SIM) – Pentachlorophenol – 37.4%; "J/UJ" results for MW-A_20201209, MW-B_20201209 and MW-X_20201209.

2.8 Internal Standards
Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity. If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All area responses and retention times fell within established QC ranges for sample analysis for spiked internal standards 1,4-Dichlorobenzene-d4, Nahthalene-d8, Acenaphthene-d10, Phenanthrene-d10, Chrysene-d12 and Perylene-d12.

2.9 Field Duplicates
Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. An acceptable RPD is 25% for aqueous samples.

Field Duplicates analysis of MW-A_20201209 as MW-X_20201209 yielded acceptable precision for full scan analysis detection of Bis (2-ethylhexyl) phthalate [1.8 ug/L vs.1.7 ug/L] and Phenol [6.6 ug/L vs. 5.0 ug/L]. Phthalates are common laboratory contaminants and could not be negated due to lack of presence in the corresponding blanks but should be considered suspect. Result are qualified, "J" by the laboratory since final quantitated values are below the reporting limit. Benzoic Acid was detected in the parent sample at 8.8 ug/L (below the reporting limit). This analyte was not detected in the field duplicate. Data was not qualified. Benzo (a) Pyrene, Benzo (b) Fluoranthene, Benzo (k) fluoranthene, Benzo (ghi) perylene and Indeno (1,2,3-cd) pyrene have been qualified, "J" in the parent and field duplicate due to RPD >25% for SIM analysis.

2.10 Target Compound List Identification
TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.
Mass spectra meet criteria for all detected analytes.

2.11 Compound Quantification and Reported Detection Limits
GC/MS quantitative analysis is acceptable. Correct internal standards and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Groundwater samples were extracted by Method 3510 (separatory funnel extraction). Samples were initially analyzed undiluted. MW-D_20201208 was reanalyzed at 1:5 dilution to obtain Phenol within the instruments' linear range. Initial results, qualified, "E" has been rejected and diluted value, qualified, "D." Groundwater samples were also analyzed by SIM techniques for select analytes to achieve lower reporting levels. SIM analysis of MW-D_20201208 was analyzed at 1:20 dilution. Raw data supports the dilution that was required due to Naphthalene concentration (1100 ug/L).

2.12 Overall System Performance
Acceptable system performance was maintained throughout the analysis.

3.0 Total and Dissolved TAL (23) Metals by ICPMS/Cold Vapor SW846 Methods 6020B/7470A

The following method criteria were reviewed: holding times, CRDL standards, calibration, blanks, MS, laboratory duplicates, LCS, field duplicates, interference check sample, ICPMS serial dilutions and sample results verification. Metals results are valid and usable with the appropriate qualifiers as notated in the following text:

3.1 Holding Times

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples were digested and analyzed for Total and Dissolved Metals within the method required holding times and the technical holding times for data validation. Samples for dissolved metals were field filtered. No qualifications were applied based upon holding time criteria or sample preservation.

3.2 Calibration (Initial and Continuing Calibration Verifications)

Satisfactory instrument calibration is established to ensure that the instruments can produce acceptable quantitative data. An initial calibration demonstrates that the instruments can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instruments are giving satisfactory sequential performance and that the initial calibration is still valid.

The ICPMS and Mercury instruments were calibrated utilizing a minimum of a four-point curve in addition to blanks at the beginning of each analytical run. The calibrations have been determined to be acceptable, yielding correlation coefficients of 0.995 or greater. Acceptable tuning criteria was met (<5%) RSD for ICPMS.

For ICPMS analysis, satisfactory instrument performance near the Contract Required Detection Limit (CRDL) was demonstrated by analyzing a CRDL standard at the beginning and end of the analytical run. The instruments were calibrated properly by analyzing the CRDL solution at the correct levels and analyzed at the required frequency at the beginning and end of each analytical run. Acceptable low level ICV/CCV was also analyzed.

All recoveries were within acceptable limits of 90-110 % for initial calibration pertaining to field samples. Continuing calibrations were within acceptable limits of 90-110% recovery of the true values for ICPMS and Mercury (80-120%) for all field samples. No qualifications were applied based upon ICV/CCV analysis.

3.3 Blanks

Quality assurance (QA) blanks, i.e., method, field or preparation blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Preparation blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

Digestion/prep/ICB/CCB were generated within acceptable limits yielding final concentrations less than the CRDL. Low detections of Antimony, Iron and Thallium were detected in several of the ICB's/CCB's. Thallium was detected in the digestion blank. The laboratory reported concentration of Thallium in dissolved MW-D_20201208 was negated "U."

Total analysis of Field Blank_20201208 yielded Barium at 0.19 ug/L, Calcium 52.9 ug/L, Manganese 1.18 ug/L and Sodium 235 ug/L. Detections in associated MW-C_2020108 and MW-D_20201208 were significantly higher than the blank levels. Sample results are not impacted. Dissolved analysis of Field Blank_20201208 yielded Barium at 0.50 ug/L, Calcium at 82.5 ug/L and Sodium at 431 ug/L. Again, sample results are not impacted.

3.4 Spiked Sample Recovery

The spike data are generated to determine the long terms precision and accuracy of the analytical method in various matrices.

Spike recoveries are qualified based on the criteria below:
<10% - "R" all detects and non-detects
Between 10%-74% - results >/= MDL "J-" and non-detects "UJ"
Between 126-200% - results >/=MDL "J+"

MS on Total analysis for MW-D_20201208 yielded Calcium and Iron above limits. Results have been qualified, "J+" in the parent sample. Additionally, recovery outliers for Potassium and Sodium were obtained due to high parent concentration relative to spike amount. These elements were not qualified. MS on Dissolved analysis of MW-D_20201208 also yielded Potassium and Sodium elevated recovery values due to high parent concentration. Selenium recovered below limits (62%/54%). Total Mercury recovered above limits in MW-D_20201208. Sample results have also been qualified, "J+" Non-detects for Selenium have been qualified, "UJ." Post digestion recovery for Total Potassium (132%) was outside criteria. Results have been qualified, "J+"

3.5 Laboratory/Field Duplicates
The laboratory uses duplicate sample determinations to demonstrate acceptable method precision at the time of analysis. Duplicate analyses are also performed to generate data to determine the long-term precision of the analytical method on various matrices.

Laboratory Duplicates:
RPD >20% but <100% - J detected concentrations
RPD >/=100% - R all detected and non-detected concentrations

MSD was performed in lieu of laboratory duplicate. Analysis is acceptable.

Field Duplicates:
RPD >/=35% but <120% - qualify sample and duplicate results >/= CRQL "J"
RPD >/= 120% - rejected sample and duplicate results >/= CRQL "R"

Field Duplicate analysis on MW-A_2020109 as MW-X_20201209 is acceptable for both total and dissolved metals.

3.6 Laboratory Control Samples
The laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous and solid Laboratory Control samples shall be analyzed for each analyte utilizing the same sample preparation, analytical methods and QA/QC procedures as employed for the samples.

LCS was analyzed and reported for ICPMS and Mercury analysis. Associated LCS recoveries were within the acceptable limits for Metals (80-120%).

3.7 Interference Check Sample
The interference check sample (ICS) verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions A and AB. Solution A consists of interference, and solution AB consists of the analytes mixed with interferents.

SW846 Method 6020B requires solution A and solution AB to be analyzed separately. The recoveries for the ICP interference check sample were all within the acceptable limits of 80-120%. No data qualifications were made based upon ICS analysis.

3.8 ICPMS Serial Dilutions

The serial dilution of samples quantitated by ICP determines whether significant physical or chemical interferences exist due to sample matrix. An ICP serial dilution analysis must be performed on a sample for each group of samples with a similar matrix type and concentration, or for each Sample Delivery Group (SDG), whichever is more frequent.

ICPMS serial dilution was performed on at 5-fold dilutions as required by the method where the initial concentration is equal or greater than 50x MDL. Serial dilution analysis of MW-D_20201208 for both total and dissolved analysis agree within a 10% difference of the original determination after correction for dilution for all reported elements. No qualifiers were required.

3.9 Sample Results Verification

Analyte quantitation was generated in accordance with protocols. The raw data was verified and found within the linear range of each instrument used for quantitation. Raw data supplied corresponds with reported values. Verification of the calculations yielded reported results. Samples were analyzed by ICPMS Method 6020B. Mercury analysis was performed in accordance with Method 7470A. Samples were analyzed undiluted as notated on the Form I's which was confirmed by laboratory digestion logs and analytical raw data.

3.10 Overall Assessment of Data

The data generated were of acceptable quality. For the Metals analysis results are usable at the concentrations presented in the validated Form I's. Acceptable Internal Standard response was observed.

Reviewer's Signature Paul A Bergh **Date** 01/12/2021

Appendix A
Chain of Custody Documents
And Sample Receipt Checklists

ALPHA

NEW YORK CHAIN OF CUSTODY

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: 12/9/20

ALPHA Job #: L2054742

Client Information

Client: AKRF Inc
Address: 34 South Broadway, 401
White Plains, NY
Phone: 914 922 2387
Fax:
Email: pmchugh@akrf.com

Project Information

Project Name: Avalon Bay Sur Site - NCE
Project Location: Yonkers, NY
Project # 180852
(Use Project name as Project #)
Project Manager: Patrick McHugh
ALPHAQuote #:

Turn-Around Time

Standard
Rush (only if pre approved)
Due Date:
# of Days:

Deliverables

ASP-A
ASP-B
EQuIS (1 File)
EQuIS (4 File)
Other: EQuIS EDD

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 add Sgrems @ all for compliance (category B deliverables)

Please specify Metals or TAL.

ANALYSIS

VOCs
SVOCs
Metals (Total Recoverable)

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	VOCs	SVOCs	Metals (Total Recoverable)	Sample Specific Comments
54742 - 01	MW-D_20201208	12/8/20	1305	GW	TG	X	X	X	
	MW-D_MS_20201208		1330			X	X	X	
	MW-D_MSD_20201208		1330			X	X	X	
-02	MW-C_20201208		1500			X	X	X	
-03	FIELD BLANK_20201208		1530			X			
-04	TRIP BLANK					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	P
Preservative	B	A	C

Relinquished By:	Date/Time	Received By:	Date/Time
Tom Gordon AKRF	12/8/20 1609	[illegible]	12/8/20 1609
[illegible]	12/8/20 1740	[illegible] AAL	12/8/20 20:30
[illegible] AAL	12/9/20 00:30	[illegible]	12/9/20 00:30

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)

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: 12/10/20

ALPHA Job #: L2054986

Client Information

Client: AARF, Inc
Address: 34 South Broadway Suite 401 White Plains, NY
Phone: 914 422 2387
Fax:
Email: pmchugh@aarf.com

Project Information

Project Name: Avalon Bay Sunrise - PCE
Project Location: Yonkers, NY
Project #: 180132
(Use Project name as Project #)
Project Manager: Patrick 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 EQuIS EDP

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 Add Sgerisp alkalinity on all wells sampled / Category B Deliverables

Please specify Metals or TAL.

ANALYSIS

VOCs | SVOCs | Metals (Total / Dissolved)

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	VOCs	SVOCs	Metals (Total / Dissolved)	Sample Specific Comments
54986-01	MW-A_20201209	12/9/20	0940	GW	TG	X	X	X	
-02	MW-B_20201209	↓	1102	↓	↓	X	X	X	
-03	MW-X_20201209	↓	1015	↓	↓	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	P
Preservative	B	A	C

Relinquished By:	Date/Time	Received By:	Date/Time
Tom Gardner	12/9/20	RECEIVED AAL Room	12/9/20 1530
RECEIVED AAL	12/9/20 1745		

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)

Sample Delivery Group Summary

Alpha Job Number : L2054742

Account Name : AKRF, Inc.
Project Number : 180132
Project Name : AVALON BAY SUN SITES-PCE

Received : 08-DEC-2020
Reviewer : Sharon Hoffman

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.4	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between sample labels & COC?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis? Following containers were received with headspace: -01B2	**NO**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

Sample Delivery Group Summary

Alpha Job Number : L2054986

Account Name : AKRF, Inc.
Project Number : 180132
Project Name : AVALON BAY SUN SITES-PCE

Received : 09-DEC-2020
Reviewer : Chris Tebeau

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
B	Absent/	Ice	2.8	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NO

Appendix B
Case Narratives

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054742
Project Number:	180132	**Report Date:**	12/18/20

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

12/15/21

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 WG1444581-4 MS/MSD recovery, performed on L2054742-01, is below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%), 3-nitroaniline (0%/0%), 4-nitrophenol (0%/0%), and carbazole (MSD 0%) due to the concentrations of these compounds in the MS/MSD falling below the reported detection limits.

Semivolatile Organics by SIM

L2054742-01: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L2054742-03: The Field Blank has a concentration above the reporting limit for Naphthalene. The field blank was re-extracted with the method required holding time exceeded and was non-detect for this target compound. The results of both extractions are reported.

WG1444582: A Matrix Spike and a Matrix Spike Duplicate were not analyzed because the dilution required by the elevated concentrations of non-target compounds present in the native sample would have caused the spike compounds to be diluted below the range of calibration.

Total Metals

L2054742-03: The Field Blank has results for manganese and sodium present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1445287-3/-4 MS/MSD recoveries, performed on L2054742-01, are outside the acceptance criteria for calcium (159%/154%) and iron (MS 127%). A post digestion spike was performed and was within acceptance criteria.

12/21
11/21

Case Narrative (continued)

The WG1445287-3/-4 MS/MSD recoveries for potassium (250%/250%) and sodium (220%/220%), performed on L2054742-01, do not apply because the sample concentrations are greater than four times the spike amounts added.
The WG1445290-3/-4 MS/MSD recoveries for mercury (287%/288%), performed on L2054742-01, do not apply because the sample concentration is greater than four times the spike amount added.

Dissolved Metals
L2054742-03: The Field Blank has results for barium and sodium present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.
The WG1445333-3/-4 MS/MSD recoveries for potassium (MS 140%) and sodium (350%/40%), performed on L2054742-01, do not apply because the sample concentrations are greater than four times the spike amounts added.
The WG1445333-3/-4 MS/MSD recoveries, performed on L2054742-01, are outside the acceptance criteria for selenium (62%/54%). A post digestion spike was performed and was within acceptance criteria.

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: Report Date: 12/18/20

Title: Technical Director/Representative

Project Name:	AVALON BAY SUN SITES-PCE	**Lab Number:**	L2054986
Project Number:	180132	**Report Date:**	12/18/20

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

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: Report Date: 12/18/20

Title: Technical Director/Representative

Appendix C
Validated Form I's
With Qualifications

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:30
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B24	Instrument ID	: GONZO
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	ND	25	7.0	U
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	ND	5.0	1.8	U
108-90-7	Chlorobenzene	ND	25	7.0	U
75-69-4	Trichlorofluoromethane	ND	25	7.0	U
107-06-2	1,2-Dichloroethane	ND	5.0	1.3	U
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
542-75-6	1,3-Dichloropropene, Total	ND	5.0	1.4	U
563-58-6	1,1-Dichloropropene	ND	25	7.0	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	14	5.0	1.6	
108-88-3	Toluene	17	25	7.0	J
100-41-4	Ethylbenzene	17	25	7.0	J
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	~~U~~ UJ
75-01-4	Vinyl chloride	ND	10	0.71	~~U~~ UJ

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:30
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B24	Instrument ID	: GONZO
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U
156-60-5	trans-1,2-Dichloroethene	ND	25	7.0	U
79-01-6	Trichloroethene	ND	5.0	1.8	U
95-50-1	1,2-Dichlorobenzene	ND	25	7.0	U
541-73-1	1,3-Dichlorobenzene	ND	25	7.0	U
106-46-7	1,4-Dichlorobenzene	ND	25	7.0	U
1634-04-4	Methyl tert butyl ether	ND	25	7.0	U
179601-23-1	p/m-Xylene	23	25	7.0	J
95-47-6	o-Xylene	13	25	7.0	J
1330-20-7	Xylenes, Total	36	25	7.0	J
156-59-2	cis-1,2-Dichloroethene	ND	25	7.0	U
540-59-0	1,2-Dichloroethene, Total	ND	25	7.0	U
74-95-3	Dibromomethane	ND	50	10.	U
96-18-4	1,2,3-Trichloropropane	ND	25	7.0	U
107-13-1	Acrylonitrile	ND	50	15.	U
100-42-5	Styrene	ND	25	7.0	U
75-71-8	Dichlorodifluoromethane	ND	50	10.	~~U~~ UJ
67-64-1	Acetone	65	50	15.	
75-15-0	Carbon disulfide	ND	50	10.	U
78-93-3	2-Butanone	ND	50	19.	U
108-05-4	Vinyl acetate	ND	50	10.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
591-78-6	2-Hexanone	ND	50	10.	U
74-97-5	Bromochloromethane	ND	25	7.0	U

for 1/11/24

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:30
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B24	Instrument ID	: GONZO
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	25	7.0	U
106-93-4	1,2-Dibromoethane	ND	20	6.5	U
142-28-9	1,3-Dichloropropane	ND	25	7.0	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	7.0	U
108-86-1	Bromobenzene	ND	25	7.0	U
104-51-8	n-Butylbenzene	ND	25	7.0	U
135-98-8	sec-Butylbenzene	ND	25	7.0	U
98-06-6	tert-Butylbenzene	ND	25	7.0	U
95-49-8	o-Chlorotoluene	ND	25	7.0	U
106-43-4	p-Chlorotoluene	ND	25	7.0	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	7.0	U
87-68-3	Hexachlorobutadiene	ND	25	7.0	U
98-82-8	Isopropylbenzene	ND	25	7.0	U
99-87-6	p-Isopropyltoluene	ND	25	7.0	U
91-20-3	Naphthalene	1400	25	7.0	
103-65-1	n-Propylbenzene	ND	25	7.0	U
87-61-6	1,2,3-Trichlorobenzene	ND	25	7.0	U
120-82-1	1,2,4-Trichlorobenzene	ND	25	7.0	U
108-67-8	1,3,5-Trimethylbenzene	ND	25	7.0	U
95-63-6	1,2,4-Trimethylbenzene	12	25	7.0	J
123-91-1	1,4-Dioxane	ND	2500	610	~~U~~ R
105-05-5	p-Diethylbenzene	ND	20	7.0	U
622-96-8	p-Ethyltoluene	7.9	20	7.0	J
95-93-2	1,2,4,5-Tetramethylbenzene	ND	20	5.4	U
60-29-7	Ethyl ether	ND	25	7.0	U

12/15/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:30
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B24	Instrument ID	: GONZO
Sample Amount	: 1 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	25	7.0	U UJ

JDC 1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:03
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B23	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	0.80	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	~~U~~ UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	~~U~~ UJ

12/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:03
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B23	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

JAT 1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:03
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B23	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U R
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

for
1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 21:03
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NLK
Lab File ID	: VG201211B23	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	~~U~~ UJ

JAF 1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:37
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B22	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	~~U~~ UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	~~U~~ UJ

gor 1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:37
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B22	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

JQS 1/11/24

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:37
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B22	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

12/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:37
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B22	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	UJ

1/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-04	Date Collected	: 12/08/20 00:00
Client ID	: TRIP BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:10
Sample Matrix	: Trip Blank (aqueous)	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B21	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	~~U~~ UJ
75-01-4	Vinyl chloride	ND	1.0	0.07	~~U~~ UJ

for 1/11/21

ALPHA ANALYTICAL

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-04	Date Collected	: 12/08/20 00:00
Client ID	: TRIP BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:10
Sample Matrix	: Trip Blank (aqueous)	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B21	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

12/11/20

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-04	Date Collected	: 12/08/20 00:00
Client ID	: TRIP BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:10
Sample Matrix	: Trip Blank (aqueous)	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B21	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

12/11/20

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-04	Date Collected	: 12/08/20 00:00
Client ID	: TRIP BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/11/20 20:10
Sample Matrix	: Trip Blank (aqueous)	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: VG201211B21	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	~~U~~ UJ

for 12/11/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 11:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A15	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	0.20	0.50	0.13	J
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.78	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	1.7	2.5	0.70	J
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	1.7	2.5	0.70	J
75-01-4	Vinyl chloride	ND	1.0	0.07	U

12/12/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 11:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A15	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	1.8	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	1.6	2.5	0.70	J
95-47-6	o-Xylene	0.98	2.5	0.70	J
1330-20-7	Xylenes, Total	2.6	2.5	0.70	J
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	~~U~~ UJ
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	9.4	5.0	1.5	J+
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	~~U~~ UJ
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

11/24/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 11:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A15	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	20	2.5	0.70	
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	~~U~~ UJ
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	0.71	2.5	0.70	J
123-91-1	1,4-Dioxane	ND	250	61.	U
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	0.78	2.0	0.70	J
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

for 12/21/21

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 11:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A15	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A16	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.55	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	~~U~~ UJ
75-01-4	Vinyl chloride	0.18	1.0	0.07	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A16	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	0.89	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	~~U~~ UJ
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	NO ~~1.6~~	5.0	1.5	~~U~~ J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	~~U~~ UJ
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

ALPHA ANALYTICAL

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A16	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	2.3	2.5	0.70	J
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	UJ
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U
123-91-1	1,4-Dioxane	420	250	61.	J+
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	ND	2.0	0.70	U
95-93-2	1,2,4,5-Tetramethylbenzene	0.61	2.0	0.54	J
60-29-7	Ethyl ether	ND	2.5	0.70	U

12/12

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:08
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A16	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A17	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	0.21	0.50	0.13	J
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
542-75-6	1,3-Dichloropropene, Total	ND	0.50	0.14	U
563-58-6	1,1-Dichloropropene	ND	2.5	0.70	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.75	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	1.7	2.5	0.70	J
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	0.97	2.5	0.70	J
75-01-4	Vinyl chloride	ND	1.0	0.07	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A-20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A17	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	1.8	0.50	0.18	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	1.6	2.5	0.70	J
95-47-6	o-Xylene	0.93	2.5	0.70	J
1330-20-7	Xylenes, Total	2.5	2.5	0.70	J
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
540-59-0	1,2-Dichloroethene, Total	ND	2.5	0.70	U
74-95-3	Dibromomethane	ND	5.0	1.0	U
96-18-4	1,2,3-Trichloropropane	ND	2.5	0.70	U
107-13-1	Acrylonitrile	ND	5.0	1.5	~~U~~ UJ
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	~~U~~ UJ
67-64-1	Acetone	9.3	5.0	1.5	J+
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-05-4	Vinyl acetate	ND	5.0	1.0	~~U~~ UJ
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A-20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A17	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
594-20-7	2,2-Dichloropropane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
142-28-9	1,3-Dichloropropane	ND	2.5	0.70	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.5	0.70	U
108-86-1	Bromobenzene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
95-49-8	o-Chlorotoluene	ND	2.5	0.70	U
106-43-4	p-Chlorotoluene	ND	2.5	0.70	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
87-68-3	Hexachlorobutadiene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	17	2.5	0.70	
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	~~U~~ UJ
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	0.72	2.5	0.70	J
123-91-1	1,4-Dioxane	ND	250	61.	U R
105-05-5	p-Diethylbenzene	ND	2.0	0.70	U
622-96-8	p-Ethyltoluene	0.77	2.0	0.70	J
95-93-2	1,2,4,5-Tetramethylbenzene	ND	2.0	0.54	U
60-29-7	Ethyl ether	ND	2.5	0.70	U

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Results Summary
Form 1
Volatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/12/20 12:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MKS
Lab File ID	: V05201212A17	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.5	0.70	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 16:17
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	~~U~~ R
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 16:17
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	22.	2.0	0.46	
106-47-8	4-Chloroanlline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U
99-09-2	3-Nitroaniline	ND	5.0	0.81	~~U~~ R
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	57.	2.0	0.50	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	3.3	5.0	0.53	J
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	81.	5.0	1.8	
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	~~U~~ R
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	~~U~~ UJ
108-95-2	Phenol	470	5.0	0.57	~~E~~ R
95-48-7	2-Methylphenol	53.	5.0	0.49	
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	140	5.0	0.48	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 16:17
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	75.	50	2.6	
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	180	2.0	0.49	

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/15/20 10:28
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 5
Lab File ID	: 54742-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
108-95-2	Phenol	510	25	2.8	D

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Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01D	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 15:13
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 20
Lab File ID	: 54742-01	Analyst	: DV
Sample Amount	: 275 ml	Instrument ID	: SV125
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	84	2.0	0.29	
91-58-7	2-Chloronaphthalene	ND	4.0	0.36	U
206-44-0	Fluoranthene	24	2.0	0.41	
87-68-3	Hexachlorobutadiene	ND	10	0.93	U
91-20-3	Naphthalene	1100	2.0	0.98	
56-55-3	Benzo(a)anthracene	2.7	2.0	0.40	
50-32-8	Benzo(a)pyrene	1.2	2.0	0.30	J
205-99-2	Benzo(b)fluoranthene	1.3	2.0	0.23	J
207-08-9	Benzo(k)fluoranthene	0.38	2.0	0.18	J
218-01-9	Chrysene	1.6	2.0	0.24	J
208-96-8	Acenaphthylene	33	2.0	0.24	
120-12-7	Anthracene	25	2.0	0.29	
191-24-2	Benzo(ghi)perylene	0.48	2.0	0.27	J
86-73-7	Fluorene	68	2.0	0.29	
85-01-8	Phenanthrene	120	2.0	0.47	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.25	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.51	2.0	0.24	J
129-00-0	Pyrene	19	2.0	0.38	
91-57-6	2-Methylnaphthalene	130	2.0	0.44	
87-86-5	Pentachlorophenol	ND	16	0.29	U
118-74-1	Hexachlorobenzene	ND	16	0.19	U
67-72-1	Hexachloroethane	ND	16	1.3	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:55
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:55
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U
99-09-2	3-Nitroanlline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	~~U~~ UJ
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:55
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	ND	50	2.6	U
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	ND	2.0	0.49	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 17:13
Sample Matrix	: WATER	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54742-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV125
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	0.16	0.10	0.01	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.04	0.10	0.02	J
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	~~0.07~~ ND	0.10	0.05	~~J~~ U
56-55-3	Benzo(a)anthracene	0.03	0.10	0.02	J
50-32-8	Benzo(a)pyrene	0.02	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.02	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.02	0.10	0.01	J
218-01-9	Chrysene	0.01	0.10	0.01	J
208-96-8	Acenaphthylene	0.02	0.10	0.01	J
120-12-7	Anthracene	0.02	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.03	0.10	0.01	J
85-01-8	Phenanthrene	0.04	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	0.05	0.10	0.02	J
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	0.74	0.80	0.01	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:32
Sample Matrix	: Field Blank	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:32
Sample Matrix	: Field Blank	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroanilline	ND	5.0	0.50	U
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	~~U~~ VJ
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/14/20 15:32
Sample Matrix	: Field Blank	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54742-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV124
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	ND	50	2.6	U
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	ND	2.0	0.49	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/17/20 15:00
Sample Matrix	: Field Blank	Date Extracted	: 12/13/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54742-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV125
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.14	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.04	0.10	0.02	J
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03RE	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 10:13
Sample Matrix	: Field Blank	Date Extracted	: 12/17/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54742-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV125
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.01	U R
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U R
206-44-0	Fluoranthene	ND	0.10	0.02	U R
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U R
91-20-3	Naphthalene	ND	0.10	0.05	U R
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U R
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U R
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U R
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U R
218-01-9	Chrysene	ND	0.10	0.01	U R
208-96-8	Acenaphthylene	ND	0.10	0.01	U R
120-12-7	Anthracene	ND	0.10	0.01	U R
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U R
86-73-7	Fluorene	0.01	0.10	0.01	J R
85-01-8	Phenanthrene	0.02	0.10	0.02	J R
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U R
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U R
129-00-0	Pyrene	ND	0.10	0.02	U R
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U R
87-86-5	Pentachlorophenol	ND	0.80	0.01	U R
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U R
67-72-1	Hexachloroethane	ND	0.80	0.06	U R

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:29
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.8	3.0	1.5	J
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:29
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U UJ
88-74-4	2-Nitroanilline	ND	5.0	0.50	U
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroanlline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U UJ
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	6.6	5.0	0.57	
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:29
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	8.8	50	2.6	J
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	ND	2.0	0.49	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 17:39
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54986-01	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	1.6	0.10	0.01	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.72	0.10	0.02	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	2.7	0.10	0.05	
56-55-3	Benzo(a)anthracene	0.30	0.10	0.02	
50-32-8	Benzo(a)pyrene	0.16	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.15	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.05	0.10	0.01	J
218-01-9	Chrysene	0.21	0.10	0.01	
208-96-8	Acenaphthylene	0.80	0.10	0.01	
120-12-7	Anthracene	0.92	0.10	0.01	
191-24-2	Benzo(ghi)perylene	0.09	0.10	0.01	J
86-73-7	Fluorene	0.88	0.10	0.01	
85-01-8	Phenanthrene	0.93	0.10	0.02	
53-70-3	Dibenzo(a,h)anthracene	0.02	0.10	0.01	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	0.10	0.01	J
129-00-0	Pyrene	2.0	0.10	0.02	
91-57-6	2-Methylnaphthalene	0.79	0.10	0.02	
87-86-5	Pentachlorophenol	0.94	0.80	0.01	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

12/17/21

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:05
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.6	3.0	1.5	J
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:05
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	~~U~~ UJ
88-74-4	2-Nitroaniline	ND	5.0	0.50	U
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	~~U~~ UJ
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 08:05
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	ND	50	2.6	~~U~~ UJ
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	ND	2.0	0.49	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 18:00
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54986-02	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	0.09	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.07	0.10	0.02	J
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	0.04	0.10	0.02	J
50-32-8	Benzo(a)pyrene	0.03	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.03	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	0.02	0.10	0.01	J
208-96-8	Acenaphthylene	0.03	0.10	0.01	J
120-12-7	Anthracene	0.05	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	0.02	0.10	0.01	J
86-73-7	Fluorene	0.03	0.10	0.01	J
85-01-8	Phenanthrene	0.05	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.02	0.10	0.01	J
129-00-0	Pyrene	0.10	0.10	0.02	J
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	~~U~~ UJ
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A-20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 07:18
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	U
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.45	U
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.40	U
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.43	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.7	3.0	1.5	J
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U

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Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 07:18
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	~~U~~ UJ
88-74-4	2-Nitroaniline	ND	5.0	0.50	U
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	~~U~~ UJ
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	5.0	5.0	0.57	
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U

JSR 1/11/21

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 07:18
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D	Dilution Factor	: 1
Lab File ID	: 54986-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV106
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
65-85-0	Benzoic Acid	ND	50	2.6	~~U~~ UJ
100-51-6	Benzyl Alcohol	ND	2.0	0.59	U
86-74-8	Carbazole	ND	2.0	0.49	U

for 1/11/21

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 18:19
Sample Matrix	: WATER	Date Extracted	: 12/15/20
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 54986-03	Analyst	: WR
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	1.4	0.10	0.01	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.68	0.10	0.02	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	3.2	0.10	0.05	
56-55-3	Benzo(a)anthracene	0.33	0.10	0.02	
50-32-8	Benzo(a)pyrene	0.31	0.10	0.02	J
205-99-2	Benzo(b)fluoranthene	0.30	0.10	0.01	J
207-08-9	Benzo(k)fluoranthene	0.11	0.10	0.01	J
218-01-9	Chrysene	0.23	0.10	0.01	
208-96-8	Acenaphthylene	0.81	0.10	0.01	
120-12-7	Anthracene	0.86	0.10	0.01	
191-24-2	Benzo(ghi)perylene	0.50	0.10	0.01	J
86-73-7	Fluorene	0.70	0.10	0.01	
85-01-8	Phenanthrene	0.84	0.10	0.02	
53-70-3	Dibenzo(a,h)anthracene	0.07	0.10	0.01	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.44	0.10	0.01	J
129-00-0	Pyrene	1.8	0.10	0.02	
91-57-6	2-Methylnaphthalene	0.81	0.10	0.02	
87-86-5	Pentachlorophenol	0.86	0.80	0.01	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

12/15/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 11:43
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	1.62	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00456	0.00400	0.00042	
7440-38-2	Arsenic, Total	0.01882	0.00050	0.00016	
7440-39-3	Barium, Total	0.08714	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	0.00022	0.00020	0.00005	
7440-70-2	Calcium, Total	37.7	0.100	0.0394	J+
7440-47-3	Chromium, Total	0.00248	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00095	0.00050	0.00016	
7440-50-8	Copper, Total	0.1026	0.00100	0.00038	
7439-89-6	Iron, Total	0.791	0.0500	0.0191	J+
7439-92-1	Lead, Total	0.07462	0.00100	0.00034	
7439-95-4	Magnesium, Total	7.72	0.0700	0.0242	
7439-96-5	Manganese, Total	0.1124	0.00100	0.00044	
7440-02-0	Nickel, Total	0.03885	0.00200	0.00055	
7440-09-7	Potassium, Total	104.	0.100	0.0309	J+
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	160.	0.100	0.0293	
7440-28-0	Thallium, Total	0.00027	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.00255	0.00500	0.00157	J
7440-66-6	Zinc, Total	0.06670	0.01000	0.00341	

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Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/17/20 15:45
Sample Matrix	: WATER	Dilution Factor	: 10
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446327.pdf	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	0.03118	0.00200	0.00091	J+

for 12/24

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 09:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.376	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00295	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.01479	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.05571	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	24.8	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00082	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00404	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0266	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	0.00043	0.00100	0.00034	J
7439-95-4	Magnesium, Dissolved	1.28	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	0.04445	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	120.	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	~~U~~ UJ
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	170.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND ~~0.00014~~	0.00100	0.00014	~~J~~ U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

1/11/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-01	Date Collected	: 12/08/20 13:25
Client ID	: MW_D_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 19:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446377.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	0.01623	0.00020	0.00009	

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 11:48
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.0821	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00223	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00159	0.00050	0.00016	
7440-39-3	Barium, Total	0.08096	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	102.	0.100	0.0394	
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00019	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00568	0.00100	0.00038	
7439-89-6	Iron, Total	0.665	0.0500	0.0191	
7439-92-1	Lead, Total	0.00312	0.00100	0.00034	
7439-95-4	Magnesium, Total	6.57	0.0700	0.0242	
7439-96-5	Manganese, Total	0.08123	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00143	0.00200	0.00055	J
7440-09-7	Potassium, Total	10.9	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	44.7	0.100	0.0293	
7440-28-0	Thallium, Total	0.00016	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	0.02448	0.01000	0.00341	

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Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 19:38
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446058.txt	Instrument ID	: NIC1
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 09:23
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00186	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00086	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.07792	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	105.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	0.00265	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0871	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	6.62	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.05053	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00125	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	11.2	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	45.8	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	0.01906	0.01000	0.00341	

for
1/1/21

ALPHA ANALYTICAL

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-02	Date Collected	: 12/08/20 15:00
Client ID	: MW_C_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 19:47
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446090.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 11:18
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00019	0.00050	0.00017	J
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	0.0529	0.100	0.0394	J
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	0.00118	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	0.235	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

JOT 12/17/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 19:41
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446058.txt	Instrument ID	: NIC1
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 09:13
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00050	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	0.0825	0.100	0.0394	J
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	0.431	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

12/21/20

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054742
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054742-03	Date Collected	: 12/08/20 15:30
Client ID	: FIELD BLANK_20201208	Date Received	: 12/08/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 19:50
Sample Matrix	: Field Blank	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: EW
Lab File ID	: WG1446090.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 10:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	1.44	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00270	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.03298	0.00050	0.00016	
7440-39-3	Barium, Total	0.01219	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	0.00007	0.00020	0.00005	J
7440-70-2	Calcium, Total	24.2	0.100	0.0394	
7440-47-3	Chromium, Total	0.00427	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00314	0.00050	0.00016	
7440-50-8	Copper, Total	0.04001	0.00100	0.00038	
7439-89-6	Iron, Total	0.790	0.0500	0.0191	
7439-92-1	Lead, Total	0.00673	0.00100	0.00034	
7439-95-4	Magnesium, Total	0.194	0.0700	0.0242	
7439-96-5	Manganese, Total	0.01094	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00582	0.00200	0.00055	
7440-09-7	Potassium, Total	18.5	0.100	0.0309	
7782-49-2	Selenium, Total	0.0110	0.00500	0.00173	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	174.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.1777	0.00500	0.00157	
7440-66-6	Zinc, Total	0.00967	0.01000	0.00341	J

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 12:01
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1445835.pdf	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 13:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1446533.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	1.12	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00342	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.03766	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00853	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	23.3	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00184	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00290	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.03203	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0757	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.0253	0.0700	0.0242	J
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	0.00525	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	17.6	0.100	0.0309	
7782-49-2	Selenium, Dissolved	0.0110	0.00500	0.00173	
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	171.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.1848	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

JDT
12/12/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-01	Date Collected	: 12/09/20 09:40
Client ID	: MW_A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 13:02
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1446619.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 10:36
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.0705	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00079	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00330	0.00050	0.00016	
7440-39-3	Barium, Total	0.06450	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	65.2	0.100	0.0394	
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00048	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00320	0.00100	0.00038	
7439-89-6	Iron, Total	1.67	0.0500	0.0191	
7439-92-1	Lead, Total	0.00119	0.00100	0.00034	
7439-95-4	Magnesium, Total	17.5	0.0700	0.0242	
7439-96-5	Manganese, Total	0.2375	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00099	0.00200	0.00055	J
7440-09-7	Potassium, Total	38.8	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	184.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00188	0.00500	0.00157	J
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 12:04
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1445835.pdf	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 13:38
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1446533.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00537	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00128	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00347	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.05421	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	67.7	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00030	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00038	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00110	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.852	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	18.1	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.2375	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00113	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	40.3	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	190.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.00184	0.00500	0.00157	J
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-02	Date Collected	: 12/09/20 11:00
Client ID	: MW_B_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 13:05
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1446619.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/16/20 10:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1445705.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/15/20

CAS NO.	Parameter	mg/l Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	1.48	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00265	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.03474	0.00050	0.00016	
7440-39-3	Barium, Total	0.01338	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	0.00009	0.00020	0.00005	J
7440-70-2	Calcium, Total	24.3	0.100	0.0394	
7440-47-3	Chromium, Total	0.00405	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00334	0.00050	0.00016	
7440-50-8	Copper, Total	0.04168	0.00100	0.00038	
7439-89-6	Iron, Total	0.995	0.0500	0.0191	
7439-92-1	Lead, Total	0.00948	0.00100	0.00034	
7439-95-4	Magnesium, Total	0.240	0.0700	0.0242	
7439-96-5	Manganese, Total	0.01475	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00578	0.00200	0.00055	
7440-09-7	Potassium, Total	18.5	0.100	0.0309	
7782-49-2	Selenium, Total	0.0112	0.00500	0.00173	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	175.	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.1778	0.00500	0.00157	
7440-66-6	Zinc, Total	0.01355	0.01000	0.00341	

12/15/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY MW-A-20201209	Date Analyzed	: 12/16/20 12:07
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1445835.pdf	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/15/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

for 1/11/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209 MW-A_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY	Date Analyzed	: 12/18/20 13:43
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: AM
Lab File ID	: WG1446533.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	1.10	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00299	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.03612	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00899	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	22.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00173	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00279	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.03212	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0851	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.0303	0.0700	0.0242	J
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	0.00556	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	17.1	0.100	0.0309	
7782-49-2	Selenium, Dissolved	0.0109	0.00500	0.00173	
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	167.	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.1781	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

JDT 1/11/21

Form 1
METALS

Client	: AKRF, Inc.	Lab Number	: L2054986
Project Name	: AVALON BAY SUN SITES-PCE	Project Number	: 180132
Lab ID	: L2054986-03	Date Collected	: 12/09/20 10:15
Client ID	: MW_X_20201209	Date Received	: 12/09/20
Sample Location	: YONKERS, NY MW-A-20201209	Date Analyzed	: 12/18/20 13:09
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,7470A	Analyst	: VW
Lab File ID	: WG1446619.txt	Instrument ID	: NIC2
Sample Amount	: 25ml	%Solids	: N/A
Digestion Method	: EPA 7470A	Date Digested	: 12/16/20

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

for
11/21

L.A.B. Validation Corp, 14 West Point Drive, East Northport, NY 11731

DATA USABILITY SUMMARY REPORT – DUSR
DATA VALIDATION SUMMARY

ORGANIC ANALYSIS

1,4-DIOXANE BY SIM GC/MS METHOD 8270D

For Groundwater Samples Collected
February 22, 2021 and February 24, 2021
Avalon Bay Sun Sites – Polychrome East
Yonkers, New York
Collected by AKRF, Inc.
Project Number: 180132-2005

SAMPLE DELIVERY GROUP NUMBERs:
L2108446 and L2109041
BY ALPHA ANALYTICAL (ELAP #11148)

SUBMITTED TO:

Mr. Patrick McHugh
AKRF, Inc.
34 South Broadway, Suite 401
White Plains, NY 10601

Cc: Mr. Steve Grens/AKRF, Inc.

March 16, 2021

PREPARED BY:

Lori A. Beyer/President
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Lori A Beyer

(516) 523-7891; email LABValidation@aol.com

Polychrome East, Yonkers, New York –
Groundwater Data Usability Summary Report (Data Validation): February 2021 Sampling Events.
Analysis for Semivolatiles - 1,4-Dioxane by 8270D Selective Ion Monitoring (SIM) Techniques.

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Data Qualifier Definitions
Sample Receipt

1.0 1,4-Dioxane by 8270D Selective Ion Monitoring (SIM) Techniques
- 1.1 Holding Time
- 1.2 Surrogate Recovery
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- 1.4 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- 1.5 Method Blanks
- 1.6 GC/MS Instrument Performance Check (Tuning)
- 1.7 Initial and Continuing Calibrations
- 1.8 Internal Standards
- 1.9 Field Duplicates
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- 1.11 Compound Quantification and Reported Detection Limits
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APPENDICES:
A. Chain of Custody Documents and Sample Receipt Checklists
B. Case Narratives
C. Validated Form I's with Qualifications

A validation was performed on groundwater samples and the associated quality control samples (Field Duplicate and Field Blank) for organic analysis for samples collected under chain of custody documentation by AKRF, Inc. and submitted to Alpha Analytical for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. Analysis was performed in accordance with requested tests per the chain of custody documents for emerging contaminant 1,4-Dioxane.

The samples were analyzed by Alpha Analytical, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing for groundwater samples consisted of Semivolatile analysis for 1,4-Dioxane.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOP for 8270 and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following groundwater samples:

Sample ID	Lab ID	Analysis	Date Collected/ Received
MW-D_20210222	L2108436-01	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/22/2021
MW-X_20210222 [Field Duplicate of MW-D_20210222]	L2108436-02	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/22/2021
FB_20210222	L2108436-03	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/22/2021
MW-C_20210222	L2108436-04	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/22/2021
MW-B_20210222	L2108436-05	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/22/2021
MW-A_20210222	L2109041-01	SW846 Method 8270D for 1,4-Dioxane using Selective Ion Monitoring (SIM) Techniques	02/24/2021

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

J+ - The result is an estimated quantity, but the result may be biased high. (Equis qualified, JK)

J- - The result is an estimated quantity, but the result may be biased low. (Equis qualified, JL)

D - Analyte concentration is from diluted analysis.

Sample Receipt:
The Chain of Custody documents indicates that the samples were received at Alpha Analytical via laboratory courier upon completion of the sampling events. Sample login notes were generated. The cooler temperatures for the sample receipts were recorded upon receipt and determined to be acceptable (<6.0 degrees C). The actual temperatures (3.2/3.0 degrees C) are recorded on the sample receipt checklists provided in Appendix A of this report. No problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary Form I's included in Appendix C includes all usable (qualified) and unusable (rejected) results for the samples identified above. The Form I's summarize the detailed narrative section of the report.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

1.0 1,4-Dioxane by 8270D Selective Ion Monitoring (SIM) Techniques

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS, Field Duplicate, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits, and overall system performance. The 1,4-Dioxane results are valid and usable as noted within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples were extracted and analyzed within the method required holding times and the technical holding times (7 days from collection for Groundwater and the Field Blank) required for data validation. Sample extracts were analyzed within 40 days of preparation as required.

1.2 Surrogate Recovery

All samples are spiked with surrogate compounds prior to sample preparation/extraction to evaluate overall laboratory performance and efficiency of the analytical technique. Additionally, the sample itself may produce effects due to

such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the evaluation of the data is dependent upon reextraction and/or reanalysis to confirm/negate laboratory error or matrix related problems. Discussion of surrogate recoveries that fell outside (above/below) QC guidelines is itemized below:

Surrogate 1,4-Dioxane-d8 was acceptable for SIM analysis. No qualifiers are required based on surrogate recovery data.

1.3 Matrix Spikes (MS)/Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

MS/MSD was not submitted in the data package. Sample results could not be evaluated based on MS/MSD data.

The National Functional Guidelines and EPA Region 2 SOPs state that "No qualifications to the data is necessary based on MS data alone."
alone."

1.4 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

Acceptable LCS/LCS Duplicates were analyzed with each sequence. Recovery values were acceptable for 1,4-Dioxane.

1.5 Method Blanks

Quality assurance (QA) blanks, i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations. The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Phthalates (common laboratory contaminants)	Sample Conc. is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value
Other Contaminants	Sample Conc. is >CRQL, but </=1x blank value	Sample Conc. Is <CRQL and </=1x blank value	Sample Conc. is >CRQL and >1x blank value

Below is a summary of the compounds in the sample and the associated qualification that have been applied:

A) **Method Blank Contamination:**
1,4-Dioxane was not detected in the method blanks associated with sample analysis.

B) **Field Blank Contamination:**
1,4-Dioxane was not detected in FB_20210222.

1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for semivolatile organics is decafluorotriphenylphosphine (DFTPP).

Instrument performance was generated within acceptable limits and frequency (12 hours) for decafluorotriphenylphosphine (DFTPP) for all analyses. Acceptable DDT breakdown was observed, and tailing factor met acceptance criteria.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

Response factors for 1,4-Dioxane reported were found to be within acceptable limits (>/=0.05), for the initial (average RRF) and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Due to the large number of analytes in this method, it is expected for some analytes to fall outside acceptance criteria and the calibration is still considered valid. Acceptable Initial Calibration Verifications were performed.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) for 1,4-Dioxane.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) for 1,4-Dioxane.

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All area responses and retention times fell within established QC ranges for sample analysis.

1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples.

An acceptable RPD is 25% as documented in EPA Region 2 SOP HW33 for aqueous samples. Professional judgment is utilized for analytes that demonstrate high percent difference. Field duplicate analysis was conducted on MW-D_20210222 as MW-X_20210222. Precision is acceptable for 1,4-Dioxane (228,000 ng/L vs. 225,000 ng/L).

1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

Mass spectra meet criteria.

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Samples were analyzed undiluted except for MW-B_20210222 which was analyzed at 1:5 dilution. Aqueous samples were extracted by Method 3510C (Separatory Funnel Extraction). Sample results are reported in ng/L where 1 ng/L = 0.001 ug/L

1.12 Overall System Performance

Good resolution and chromatographic performance were observed.

Reviewer's Signature Paula Rugg **Date** 03/16/2021

Appendix A
Chain of Custody Documents
And Sample Receipt Checklists

NEW JERSEY CHAIN OF CUSTODY

ALPHA

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: 2/22/21

ALPHA Job #: L2108436

Client Information
Client: AKRF INC
Address: 440 PARK AVES
NY NY
Phone: (mcHugh@AKRFcom
Fax:
Email:

Project Information
Project Name: AVB-PLE
Project Location: YONKERS NY
Project #: 30132-2005
(Use Project name as Project #)
Project Manager: PAT MCHUGH
ALPHAQuote #:

Turn-Around Time
Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

Deliverables
[ ] NJ Full / Reduced
[ ] EQuIS (1 File) [X] EQuIS (4 File)
[ ] Other

Regulatory Requirement
[ ] SRS Residential/Non Residential
[ ] SRS Impact to Groundwater
[ ] NJ Ground Water Quality Standards
[ ] NJ IGW SPLP Leachate Criteria
[ ] Other

Billing Information
[ ] Same as Client Info
PO #

Site Information
Is this site impacted by Petroleum? Yes [ ]
Petroleum Product:

These samples have been previously analyzed by Alpha [ ]

For EPH, selection is REQUIRED:
[ ] Category 1
[ ] Category 2

For VOC, selection is REQUIRED:
[ ] 1,4-Dioxane
[ ] 8011

Other project specific requirements/comments:
EMERGING CONTAMINANTS

Please specify Metals or TAL

ANALYSIS

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	1,4 Dioxane	Sample Specific Comments
08436-01	MW-D_20210222	2/22/21	915	WATER	SJ	X	
02	MW-X_20210222		0000			X	
03	FB_20210222		1000			X	
04	MW-6_20210222		1035			X	
05	MW-8_20210222		1140			X	

Total Bottle

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
	2/22/21 1430		
		Paul Mazzella	2/22/21 1605
Paul Mazzella	2/22/21 2130		
			2/22 23:40

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: 01-14 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA

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 | of |

Date Rec'd in Lab: 2/25/21

ALPHA Job #: L2109041

Client Information
Client: AKRF INC.
Address: 440 PARK AVE S NY NY
Phone:
Fax:
Email:

Project Information
Project Name: NYB-PTC
Project Location: LONG ISLAND CITY
Project #: 130132 - 2005
(Use Project name as Project #)
Project Manager: ART RUSSELL
ALPHAQuote #:

Turn-Around Time
Standard: X 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:
EMERGING CONTAMINANTS

Please specify Metals or TAL.

ANALYSIS
1,4 DIOXANE

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	1,4 DIOXANE	Sample Specific Comments
09 41 - 01	MW-A-20210224	2/24/21	1355	WATER	CD	X	

Container Type
Preservative

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

Relinquished By:	Date/Time	Received By:	Date/Time
	2/24/21 1600		2/24/21 1600
	2/24/21 1825		2/24/21 2000
	2/25/21 0025		2/25/21 0025
	2/25/21 4:00		2/25/21 0410

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)

Sample Delivery Group Summary

Alpha Job Number : L2108436

Account Name : AKRF, Inc.
Project Number : 180132-2005
Project Name : AVB-PCE

Received : 22-FEB-2021
Reviewer : Melissa Wood

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.2	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NA

Sample Delivery Group Summary

Alpha Job Number : L2109041

Account Name : AKRF, Inc.
Project Number : 180132-2005
Project Name : AVB-PCE

Received : 24-FEB-2021
Reviewer : Andrew Kussmaul

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.0	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NA

Appendix B
Case Narratives

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

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 Report Date: 03/02/21

Title: Technical Director/Representative

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

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

Please contact Client Services at 800-624-9220 with any questions.

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 Report Date: 03/04/21

Title: Technical Director/Representative

Appendix C
Validated Form I's
With Qualifications

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2108436
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2108436-01	Date Collected	: 02/22/21 09:15
Client ID	: MW-D_20210222	Date Received	: 02/22/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/01/21 07:27
Sample Matrix	: WATER	Date Extracted	: 02/26/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F602282141	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	228000	150	33.9	

JOR 311521

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2108436
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2108436-02	Date Collected	: 02/22/21 00:00
Client ID	: MW-X_20210222 MW-D - 20210222	Date Received	: 02/22/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/02/21 06:46
Sample Matrix	: WATER	Date Extracted	: 02/26/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F603012133	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	225000	150	33.9	

3/15/21

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2108436
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2108436-03	Date Collected	: 02/22/21 10:00
Client ID	: FB_20210222	Date Received	: 02/22/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/01/21 13:15
Sample Matrix	: WATER	Date Extracted	: 02/26/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F603012104	Analyst	: PS
Sample Amount	: 270 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	ND	139	31.4	U

for 3/15/21

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2108436
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2108436-04	Date Collected	: 02/22/21 10:35
Client ID	: MW-C_20210222	Date Received	: 02/22/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/01/21 14:01
Sample Matrix	: WATER	Date Extracted	: 02/26/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F603012105	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	205.	150	33.9	

for 3/15/21

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2108436
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2108436-05D	Date Collected	: 02/22/21 11:40
Client ID	: MW-B_20210222	Date Received	: 02/22/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/01/21 16:52
Sample Matrix	: WATER	Date Extracted	: 02/26/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 5
Lab File ID	: F603012109	Analyst	: PS
Sample Amount	: 250 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	703000	750	170.	

3/15/21

Results Summary
Form 1
1,4 Dioxane by 8270D-SIM

Client	: AKRF, Inc.	Lab Number	: L2109041
Project Name	: AVB-PCE	Project Number	: 180132-2005
Lab ID	: L2109041-01	Date Collected	: 02/24/21 13:55
Client ID	: MW-A_20210224	Date Received	: 02/24/21
Sample Location	: YONKERS, NY	Date Analyzed	: 03/03/21 23:58
Sample Matrix	: WATER	Date Extracted	: 03/01/21
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: F603022158	Analyst	: PS
Sample Amount	: 240 ml	Instrument ID	: GCMS6
Extraction Method	: EPA 3510C	GC Column	: RTX-5
Extract Volume	: 2500 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ng/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
123-91-1	1,4-Dioxane	4030	156	35.3	

for 3/15/21

APPENDIX H

MONTHLY PROGRESS REPORTS

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

February 14, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – January 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of January 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of January 2020. On January 9 and 10, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of January 2020, no on-Site excavation activities occurred. Building construction, general site work, and landscaping work were performed throughout this period.
- On January 9, 2020, AKRF completed monthly gauging of the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. Dense non-aqueous phase liquid (DNAPL) was detected in NW-3 (~2.28-ft.) and NW-4 (~2.27-ft.). NAPL recovery wells are equipped with 3-foot sumps. Monthly gauging results for the January 2020 reporting period are included in Table 1.
- On January 9, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York. Measurable DNAPL was removed from recovery wells NW-3 (~6 gallons) and NW-4 (~10 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the recovered DNAPL and decontamination wash water stored on-Site in grid cell

E3 in 55-gallon drums and labeled as hazardous waste, pending off-site disposal at an appropriate receiving facility.

- AKRF anticipates to conduct DNAPL removal in February 2020 in the same method as described for January 2020 while long-term trends and alternate recovery methods are evaluated. DNAPL recovery totals are included in Table 2.
- No soil or stone was imported to the Site during the month of January.

The following work is planned for February 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System; and
- NAPL well monitoring and product recovery.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Jeff Perlman – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

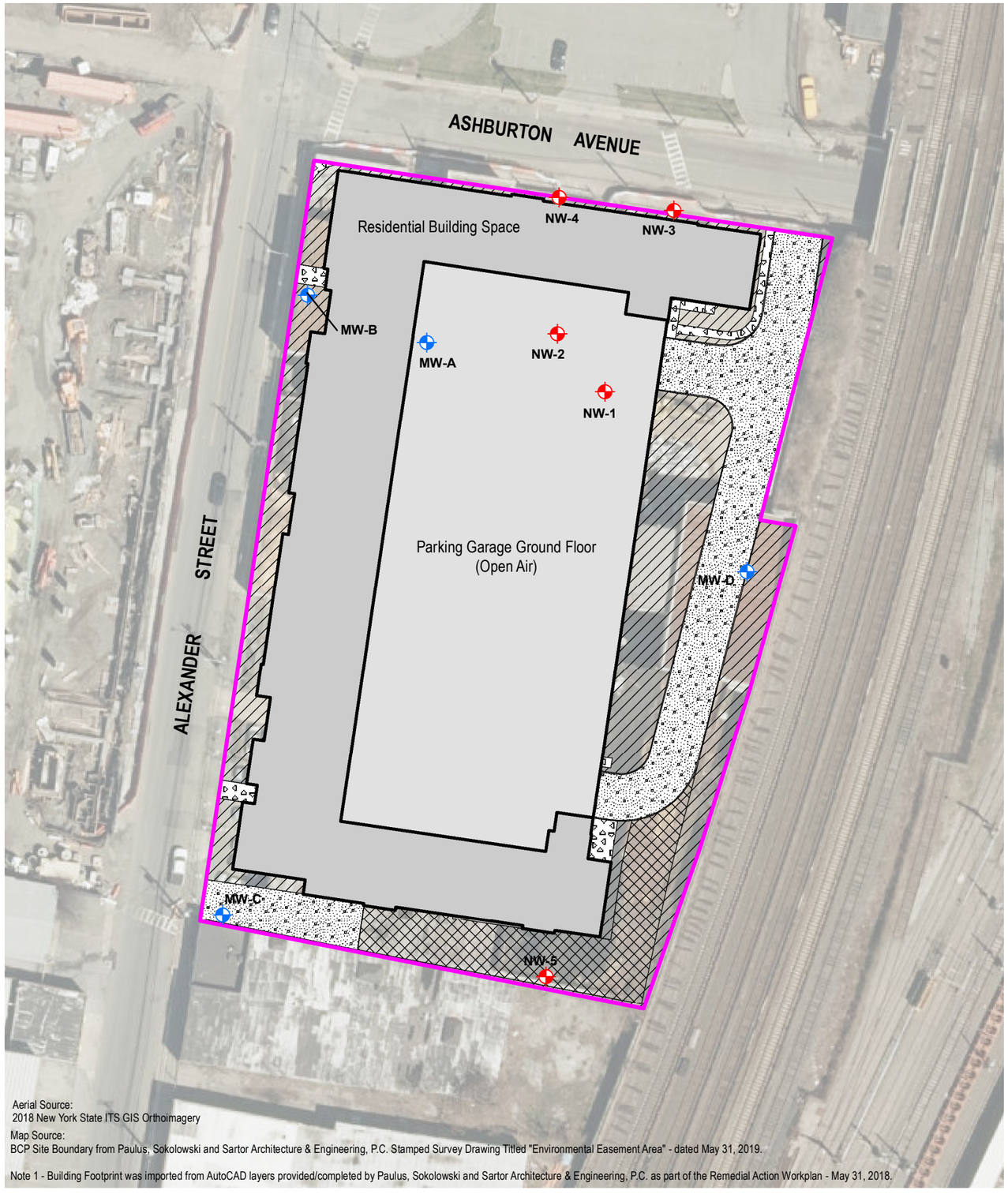
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.9	NA	NA	
MW-D	1/9/2020	16:13	ND	7.3	ND	15.7	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.5**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.1	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.1	NA	NA	
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Jan-20	NA	NA	6	10	NA	16	1/9/2020	NA	NA

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

March 26, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – February 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of February 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of January 2020. On February 19 and 21, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of February 2020, no on-Site excavation activities below the final cover system occurred. Building construction, general site work, and landscaping work were performed throughout this period.
- On February 19, 2020, AKRF completed monthly gauging of the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. Dense non-aqueous phase liquid (DNAPL) was detected in NW-3 (~5.87-ft.) and NW-4 (~2.96-ft.). NAPL recovery wells are equipped with 3-foot sumps. Monthly gauging results for the February 2020 reporting period are included in Table 1.
- On February 19, 2020, Brookside Environmental of Copiague, New York, removed one drum of decontamination fluids generated during the December 2010 and January 2020 NAPL recovery events. The drum was disposed of at Clean Waters of New York in Staten Island, New York. The drum was accidentally shipped under a manifest for the adjacent Polychrome West site (C360099). A corrected

manifest will provided to NYSDEC upon receipt and included in the Periodic Review Report (PRR) for 2020.

- Transportation and disposal of excavated Category 2 soil from the sanitary sewer connection to the adjacent PW site, below the adjacent street (Alexander Street from ~5 to 15-ft. below grade), and from the waterline connection in the street adjacent to the PE Site were completed on February 20 and 21, 2020. A total of 48.40 tons of soil were transported for off-site disposal at CEC [represented by sample PCE-WC-24-1002019). The final disposal manifests are included in Attachment A and will be included in the PRR for 2020.
- On February 21, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York. Measurable DNAPL was removed from recovery wells NW-3 (~9.5 gallons) and NW-4 (~18.5 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a DOT-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E3, pending off-site disposal at an appropriate receiving facility.
- A total of 28 gallons of DNAPL were recovered during the reporting period, and 52.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- On February 21, Veolia Environmental Services (VES) picked up one drum of DNAPL and two crushed drums for off-site disposal at their facility in Flanders, New Jersey. The final disposal manifest is included in Attachment A and will be included in the PRR for 2020.
- AKRF anticipates to conduct DNAPL removal in March 2020 in the same method as described for February 2020 while long-term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of February.

The following work is planned for March 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System; and
- NAPL well monitoring and product recovery.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Disposal Manifests

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Jeff Perlman – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

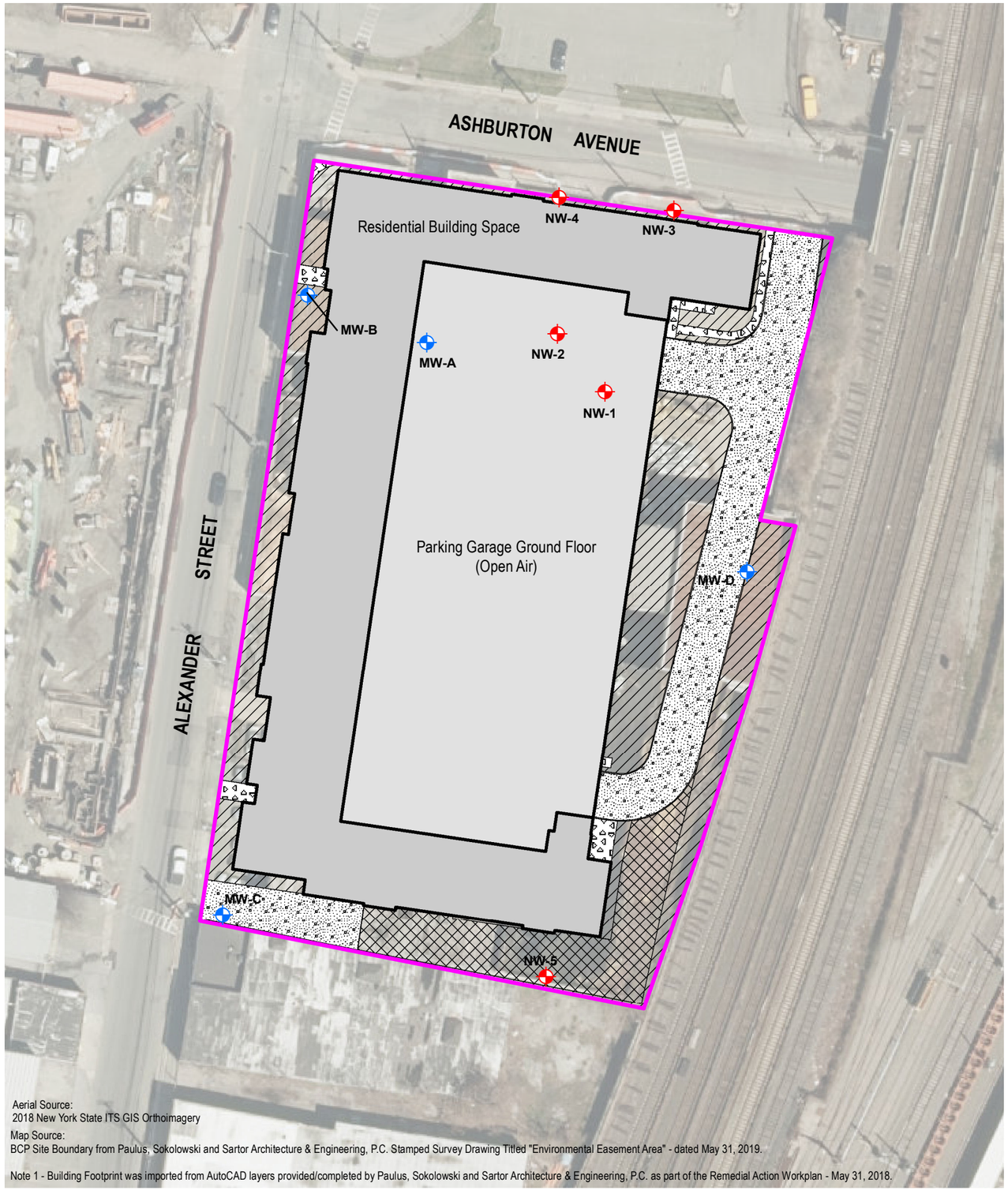
Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1



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.

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LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.10	ND	24.80	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**post-pumping measurement ~9.5 gallons removed**
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.5**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/19	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/20	2/21/2020	Veolia ES
Feb-20	NA	NA	9.50	18.50	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
				TOTAL TO DATE:		**52.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

ATTACHMENT A

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT

1. Generator ID Number: NYV8093
2. Page 1 of: 1
3. Emergency Response Phone: (877) 816-0057
4. Shipping Document Tracking Number: ZZ 00818827

5. Generator's Name and Mailing Address:
ROBERT ACAMPORA
POLYCHROME EAST (BUILDING 3)
80-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 415-7399

Generator's Site Address (if different than mailing address):
SAME

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD080691369

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 PEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347-7111
U.S. EPA ID Number: NJD980559593

9a HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, COAL TAR), 3, II, RQ (D001)	1	DM	300	P	D001 D018
	2. EMPTY DRUMS	1	DM	70	P	NONE R
	3.					
	4.					

14. Special Handling Instructions and Additional Information: ER Service Contracted by VESTS (i.e. Cont actor retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: [illegible]
Signature: Bob Acampora
Month: 12 Day: 21 Year: 20

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S.
Transporter signature (for exports only):
Port of entry/exit:
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Shipment

Transporter 1 Printed/Typed Name: Brian Daire
Signature:
Month: 12 Day: 21 Year: 20

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

18. Discrepancy

18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Shipping Document Tracking Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Waste Management Method Codes (i.e., codes for treatment, disposal, and recycling systems):

1.	2.	3.	4.
H141	H141		

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a

Printed/Typed Name: Eric Saper
Signature: Eric Saper
Month: 12 Day: 21 Year: 20

DESIGNATED FACILITY TO GENERATOR

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 7325418909 Fax: 7325418105

Ticket: 700001346779

	Date	Time	Scale
In:	2/20/2020	10:40:55	CECSCALE1
Out:	2/20/2020	10:41:07	

Manifest: 1998173

Vehicle ID: 07EMPIR305

Vehicle Permit:

	Lbs.	Tns
Gross:	80780.00	40.39
Tare:	25180.00	12.59
Net:	55600.00	27.80

Customer TONY CASALE INC

Carrier: .

Facility Approval#: 183071338

Generator: Avalon Yonkers Sun Sites, LLC

Gen Address: 1499 Post Road
Fairfield, CT 07008

Job Name: Avalon Yonkers Sun Sites, LLC/ATI Bldg #

Job Address: 79-91 Alexander Street
Yonkers, NY 10701

Contaminate Type	Quantity	Unit
Soil Treatment Type II	27.8000	TONS

Comment:

Driver:

Facility: _____
Gibson, Barry

CLEANEARTH

Manifest # 1998173

GLOBAL JOB NUMBER: 147864 **FACILITY APPROVAL NUMBER:** 1830713390

Please Check One:

- [X] Clean Earth of Carteret, 24 Middlesex Avenue, Carteret, NJ 07008, Ph: 732-541-8909
- [ ] Clean Earth of Maryland, 1469 Oak Ridge Place, Hagerstown, MD 21740, Ph: 301-791-6220
- [ ] Clean Earth of New Castle, 94 Pyles Lane, New Castle, DE 19720, Ph: 302-427-6633
- [ ] Clean Earth of Greater Washington, 6250 Dower House Road, Upper Marlboro, MD 20772, Ph: 301-599-0939
- [ ] Clean Earth of Philadelphia, 3201 S. 61st Street, Philadelphia, PA 19153, Ph: 215-724-5520
- [ ] Clean Earth of North Jersey, 115 Jacobus Avenue, Kearny, NJ 07032, Ph: 973-344-4004
- [ ] Clean Earth of Southeast Pennsylvania, 7 Steel Road East, Morrisville, PA 19067, Ph: 215-428-1700
- [ ] Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT: ☐Tons ☐Yards	
Avalon Yonkers PCE #3		
20-94 Alexander St.	TARE WEIGHT: ☐Tons ☐Yards	
Yonkers, NY		
GENERATOR'S PHONE:	NET WEIGHT: ☐Tons ☐Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

PCE-WC-24-10022019

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: X _____ Title: _____

Signature: _____ Date and Time: _____

TRANSPORTER

Company: Empire State Trucking Phone Number: 862 202 1033

Address: 63 E 157 St Mt. Vernon NY Truck # and License Plate: 59994 NY

Driver: Gianni Valentin (Type or Print Clearly) SW Haulers Permit #: _____ (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: _____ Date and Time: 2/20/20

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: 2/20/20

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: 2/20/20

FACILITY

Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 7325418909 Fax: 7325418105

Ticket: 700001347961

	Date	Time	Scale
In:	2/21/2020	09:05:54	CECSCALE1
Out:	2/21/2020	09:06:02	

Manifest: 1998177

Vehicle ID: 07EMPIR305

Vehicle Permit:

	Lbs.	Tns
Gross:	66380.00	33.19
Tare:	25180.00	12.59
Net:	41200.00	20.60

Customer TONY CASALE INC

Carrier: .

Facility Approval#: 183071338

Generator: Avalon Yonkers Sun Sites, LLC

Gen Address: 1499 Post Road
Fairfield, CT 07008

Job Name: Avalon Yonkers Sun Sites, LLC/ATI Bldg #

Job Address: 79-91 Alexander Street
Yonkers, NY 10701

Contaminate Type	Quantity	Unit
Soil Treatment Type II	20.6000	TONS

Comment:

Driver:

Facility: _____
Gibson, Barry

CLEANEARTH

Manifest # 1998177

GLOBAL JOB NUMBER: 147864 **FACILITY APPROVAL NUMBER:** 1830 71338

Please Check One:

☒ Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909

☐ Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220

☐ Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633

☐ Clean Earth of Greater Washington
6250 Dower House Road
Upper Marlboro, MD 20772
Ph: 301-599-0939

☐ Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

☐ Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

☐ Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

☐ Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT: ☐Tons ☐Yards	
Avalon Yonkers PCE #3 80-94 Alexander St Yonkers, NY	TARE WEIGHT: ☐Tons ☐Yards	
GENERATOR'S PHONE:	NET WEIGHT: ☐Tons ☐Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

PCE-WL-24-10022018

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: _____ Title: _____

Signature: _____ Date and Time: _____

TRANSPORTER

Company: Empire State Trucking Phone Number: _____

Address: 63 E 1st St. Mt Vernon Truck # and License Plate: _____

Driver: Gianni Valentin SW Haulers Permit #: _____

(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: _____ Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: 2/21/20

FACILITY

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

April 15, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – March 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of March 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of March 2020.
- On March 25 and 26, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of March 2020, no on-Site excavation activities below the final cover system occurred. Building construction, general site work, and landscaping work were performed throughout this period.
- March 5, 2020, Brookside Environmental of Copiague, New York, removed one drum of decontamination fluids and one drum of used personal protective equipment (PPE) and oily debris generated during previous DNAPL recovery events. The drums were disposed of at Clean Waters of New York in Staten Island, New York. The manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2020.
- On March 25, 2020, AKRF completed monthly gauging of the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. Dense non-aqueous phase liquid (DNAPL) was detected in NW-3 (~6.6-ft.)

and NW-4 (~2.6-ft.). NAPL recovery wells are equipped with 3-foot sumps. Monthly gauging results for the March 2020 reporting period are included in Table 1.

- On March 26, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York. Measurable DNAPL was removed from recovery wells NW-3 (~8 gallons) and NW-4 (~7 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E6, pending off-site disposal at an appropriate receiving facility.
- A total of 15 gallons of DNAPL were recovered during the reporting period, and 67.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates to conduct DNAPL removal in April 2020 in the same method as described for March 2020 while long-term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of March.

Limited, essential work is planned for April 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System; and
- NAPL well monitoring and product recovery.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Disposal Manifests

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

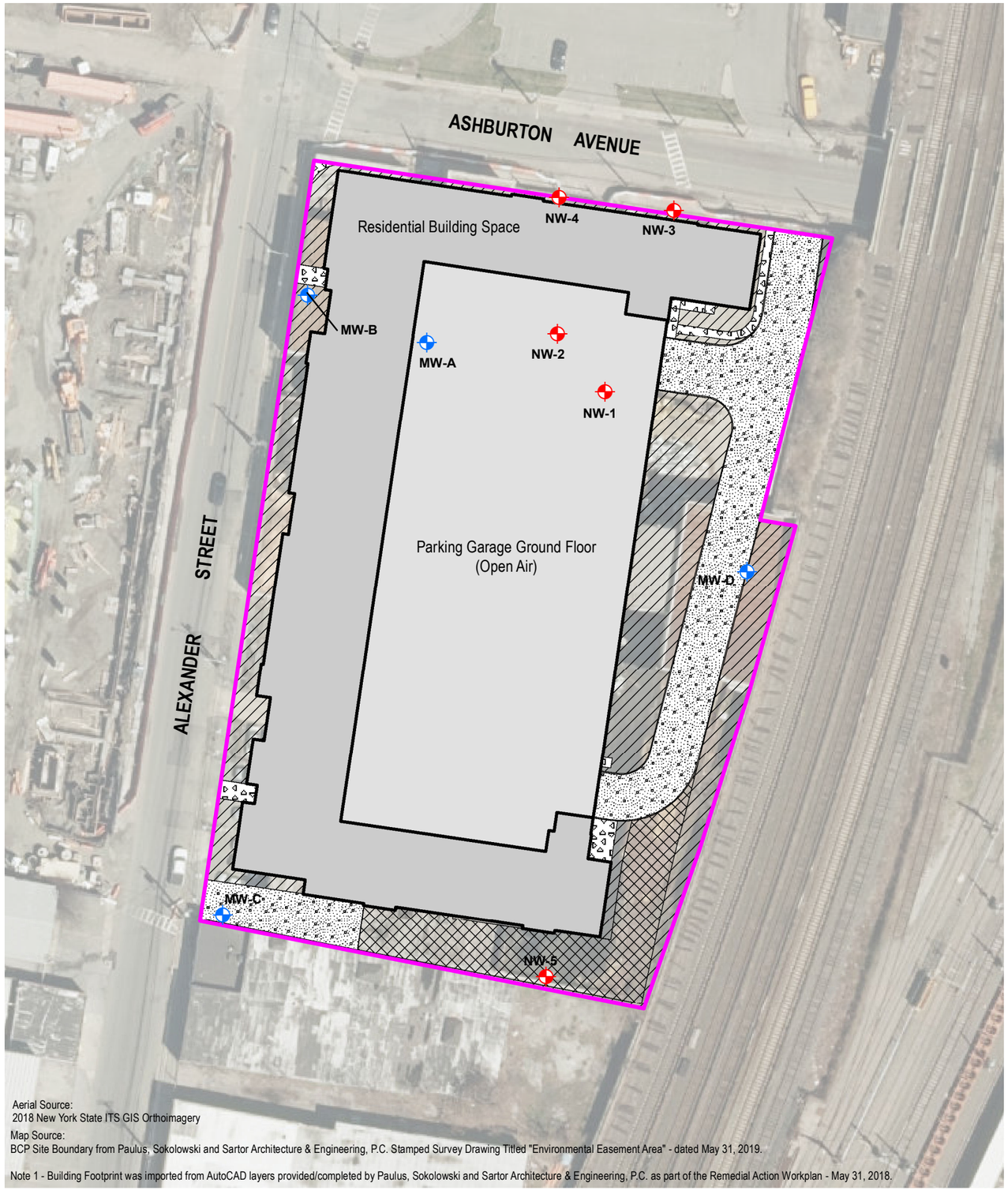
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.8	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.5**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/19	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/20	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	Pending	Pending
				TOTAL TO DATE:		**67.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

ATTACHMENT A

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	3520-2481-E

GENERATOR

5. Generator's Name and Mailing Address
Avalon Yonkers Sun Sites LLC
1499 Post Road
Fairfield CT 06824
Generator's Phone: 201 694-3657

Generator's Site Address (if different than mailing address)
Polychrome East
90-94 Alexander Street
Yonkers NY 10701

6. Transporter 1 Company Name: Brookside Environmental, Inc.
U.S. EPA ID Number: NYR000081661

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Water of New York
3249 Richmond Terrace
Staten Island NY 10303
Facility's Phone: 718 981-4600
U.S. EPA ID Number: NYD000988545

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-regulated material, solid	001	DM	500	P	
2.	Non-regulated material, liquid	001	DM	20	G	
3.						
4.						

13. Special Handling Instructions and Additional Information
1) Used PPE and debris. Approval #237-257 2) Oily water. Approval # 237-238

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: X ROBERT ACAMPORA
Signature: X
Month: 03 Day: 05 Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Nicholas Holdener
Signature:
Month: 03 Day: 05 Year: 20

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Phil Cruz
Signature:
Month: 3 Day: 5 Year: 20

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

May 22, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – April 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of April 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of April 2020.
- On April 21 and 22, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of April 2020, no on-Site excavation activities below the final cover system occurred. Building construction, general site work, and landscaping work were performed throughout this period.
- On April 15, 2020, NYSDEC requested via email that NAPL monitoring wells NW-3 and NW-4 be gauged on a more frequent (weekly or bi-weekly) basis. Since receipt of this email, AKRF has performed weekly gauging of NAPL monitoring wells NW-3 and NW4.
- On April 21, 2020, AKRF completed monthly gauging of the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. Dense non-aqueous phase liquid (DNAPL) was detected in NW-3 (~5.79-ft.) and NW-4 (~1.71-ft.). NAPL recovery wells are equipped with 3-foot sumps. A measurable thickness of a light non-aqueous phase liquid (LNAPL) was also detected in NW-3 (~0.1 feet). Based on field observations and that LNAPL was not measurable during the April 30, 2020 gauging event, it

is presumed the observed LNAPL is a result of coal tar adhering to the interior walls of the well casing near the top of the groundwater table. This will be further evaluated during monitoring events performed in May 2020. Monthly gauging results for the April 2020 reporting period are included in Table 1.

- On April 22, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York. Measurable DNAPL was removed from recovery wells NW-3 (~7.5 gallons) and NW-4 (~7.5 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E6 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of 15 gallons of DNAPL were recovered during the reporting period, and 82.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- On April 30, 2020, AKRF performed the weekly gauging of NAPL monitoring recovery wells NW-3 and NW-4. DNAPL was detected in NW-3 (~2.95-ft.) and NW-4 (~1.66-ft.). NAPL recovery wells are equipped with 3-foot sumps. The weekly gauging results conducted on April 30, 2020 are included in Table 1.
- AKRF anticipates to complete DNAPL gauging and removal in May 2020 using the same methods as described above while long term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of April.

Limited, essential work is planned for May 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System;
- NAPL recovery well weekly/monthly monitoring and monthly NAPL recovery; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment (PPE) and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

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AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

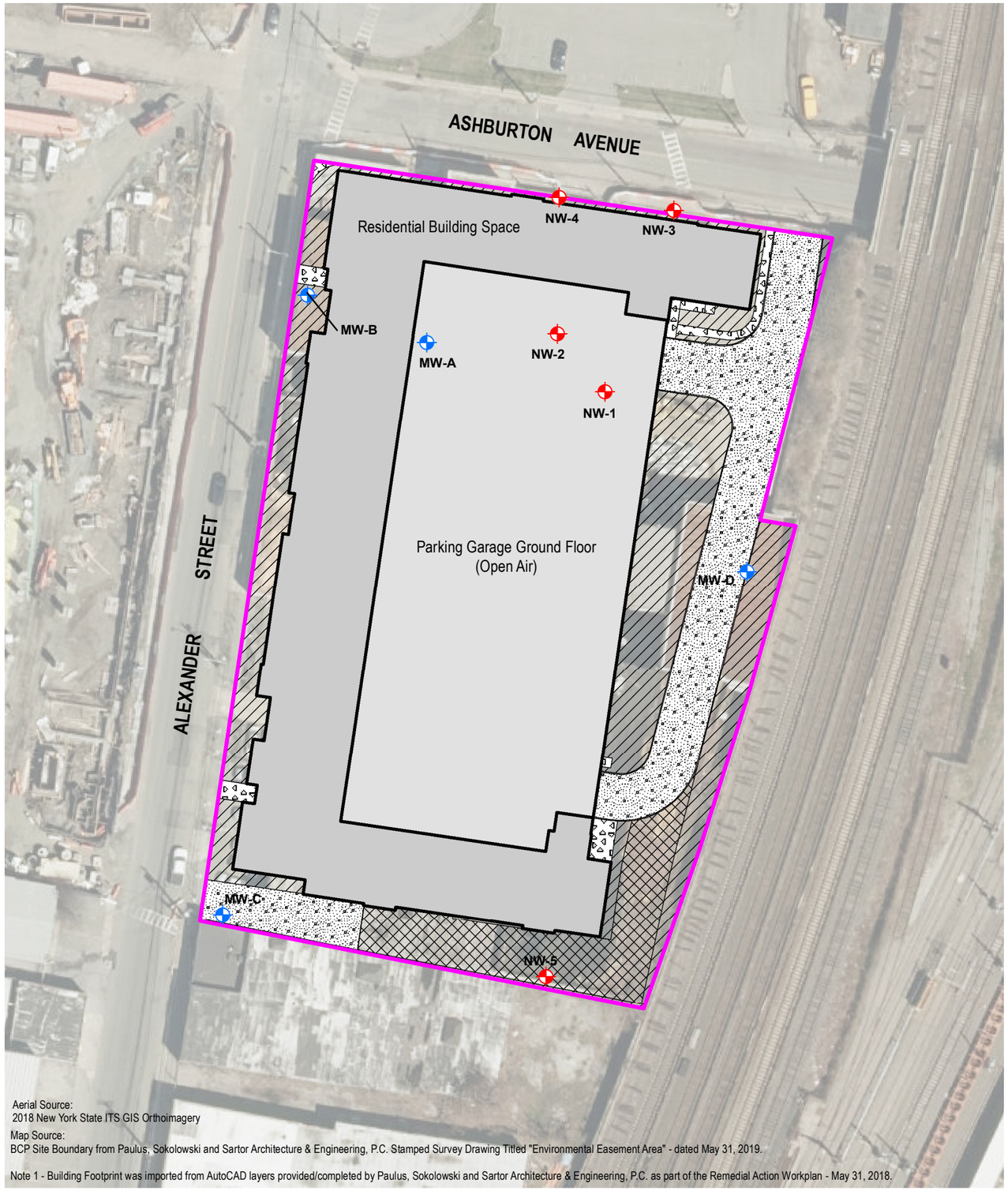
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.8	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.5**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	Pending	Pending
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	Pending	Pending
				TOTAL TO DATE:		**82.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

June 26, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – May 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of May 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of May 2020.
- On May 19, 20, and 21, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of May 2020, no on-Site excavation activities below the final cover system occurred. Building construction and general site work were paused due to ongoing COVID-19 limitations.
- On May 7, 2020, a measurable thickness of a light non-aqueous phase liquid (LNAPL) (~0.2 feet) and DNAPL (~4.63-ft.) were detected in NW-3. On May 14, 2020, DNAPL was detected in NW-3 (~5.90-ft.) and NW-4 (~1.74-ft.). On May 19, 2020, AKRF completed monthly gauging of the following groundwater monitoring and non-aqueous phase liquid (NAPL) recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL was detected in NW-3 (~5.04-ft.) and NW-4 (~2.11-ft.). NAPL recovery wells are equipped with 3-foot sumps. Based on field observations and that LNAPL was not measurable during May 14 and 19, 2020 gauging events, it is presumed the observed LNAPL is a result of coal tar adhering to the interior walls of the well casing near the top of the groundwater table. This will be further evaluated during future monitoring events. Monthly gauging results for the May 2020 reporting period are included in Table 1.

- On May 20, 2020 Eastern Environmental of Manorville, New York (Eastern) removed and replaced the internal 1-inch PVC vacuum pipes located within wells NW-3 and NW-4 with 1-inch stainless steel pipes. The corrosive nature of the DNAPL had deteriorated the previously installed PVC rendering it unusable during removal with a vacuum truck. Eastern removed, decontaminated, and containerized the internal PVC vacuum pipes into a DOT-approved 55-gallon drum, which was subsequently transported for off-site disposal as non-hazardous waste (oily debris) at Clean Waters of New York in Staten Island, New York. The final disposal manifest will be included in the PRR for 2020.
- On May 20, 2020, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the March and April 2020 DNAPL pumping events for off-site disposal their facility in Flanders, New Jersey. The final disposal manifest is included in Attachment A and will be included in the PRR for 2020.
- On May 21, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York. Measurable DNAPL was removed from recovery wells NW-3 (~20 gallons) and NW-4 (~20 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E6 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of 40 gallons of DNAPL were recovered during the reporting period, and 122.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). The increase in recovery for this reporting period likely includes the removal of some groundwater during the event due to the challenge of recovering the viscous coal tar during DNAPL pumping activities. DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates to complete DNAPL gauging and removal in June 2020 using the same methods as described above while long term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of May.

The following work is planned for June 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System;
- NAPL recovery well weekly/monthly monitoring and monthly NAPL recovery; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – VES Manifest

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

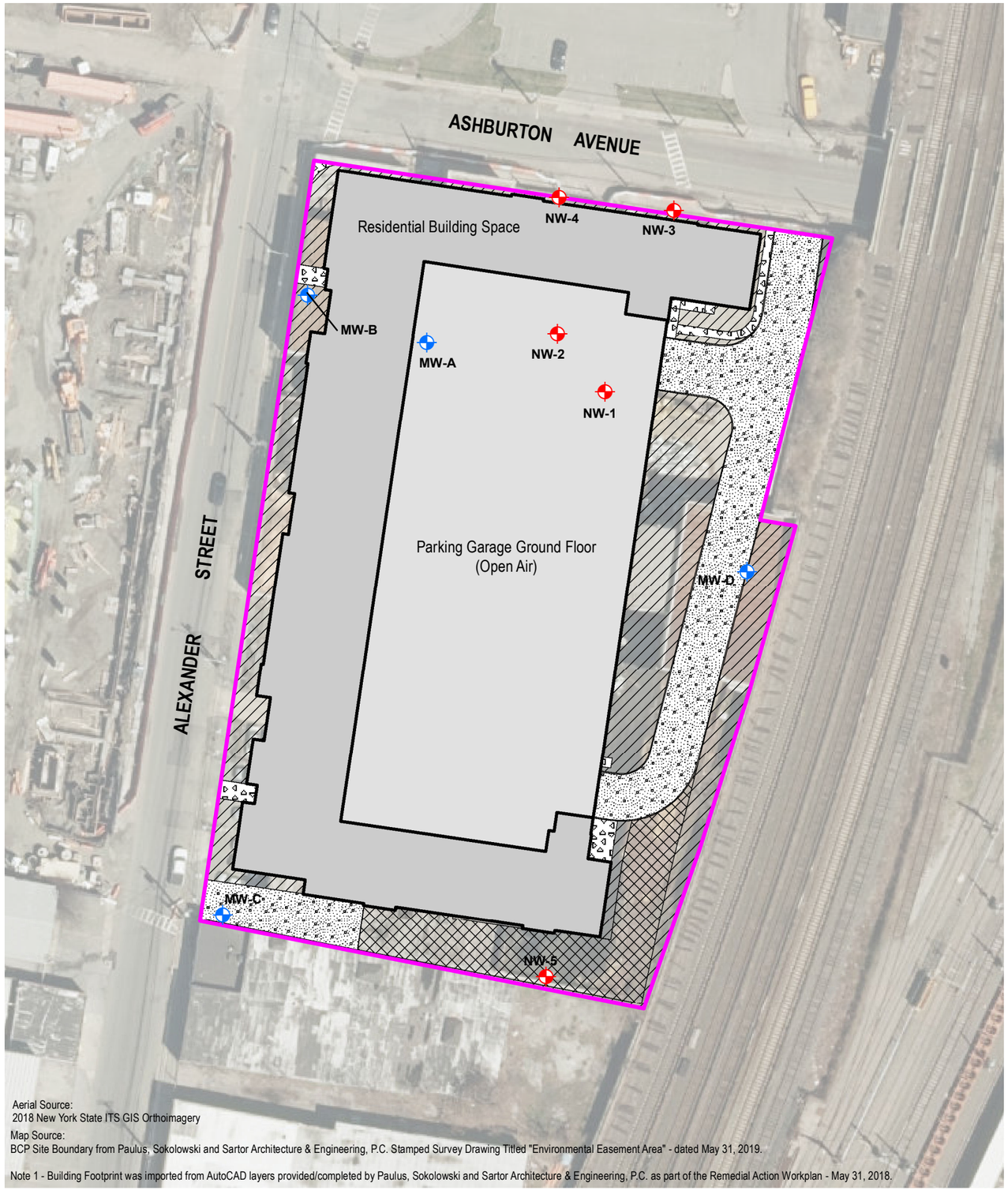
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	Pending	Pending
				TOTAL TO DATE:		**122.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

ATTACHMENT A - VES MANIFEST

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYVSQG	1	(877) 818-0087	001802660 VES

GENERATOR

5. Generator's Name and Mailing Address: ROBERT ACAMPORA
POLYCHROME EAST (BUILDING 3)
80-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 415-7399

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS — U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347-7111 — U.S. EPA ID Number: NJD980536593

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, COAL TAR), 3, II	1	DM	200	P	D001 B; D018
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: ER Service Contracted by VESTS + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Fitzpatrick — Signature: [signature] — Month/Day/Year: 05/20/20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Pabst — Signature: [signature] — Month/Day/Year: 5/20/20

Transporter 2 Printed/Typed Name — Signature — Month/Day/Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month/Day/Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
M141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Duncan Cammell — Signature: [signature] — Month/Day/Year: 05/20/20

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

July 30, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – June 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of June 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of June 2020.
- On June 24 and 25, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of June 2020, no on-Site excavation activities below the final cover system occurred.
- On June 12, 2020, Brookside Environmental of Copiague, New York (Brookside), removed one drum of decontamination fluids and one drum of used personal protective equipment (PPE) and oily debris generated during previous DNAPL recovery events. The drums were disposed of at Clean Waters of New York in Staten Island, New York. The manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2020.
- On June 12 and 29, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On June 24, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the June 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 6/12/20 (feet)	DNAPL Thickness 6/24/20 (feet)	DNAPL Thickness 6/29/20 (feet)
NW-3	4.93	5.95	4.31
NW-4	1.40	2.75	1.14

Note: Measured DNAPL thicknesses are estimated.

- On June 25, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~10 gallons) and NW-4 (~10 gallons) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E6 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of 20 gallons of DNAPL was recovered during the reporting period, and 142.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- On June 25, 2020, Eastern removed one drum of used personal protective equipment (PPE) and oily debris generated during previous DNAPL recovery events. The drum was disposed of at Clean Waters of New York in Staten Island, New York. The manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2020.
- AKRF anticipates to complete DNAPL gauging and removal in July 2020 using the same methods as described above while long term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of June.

The following work is planned for July 2020:

- Grading activities with NYSDEC-approved Category 1 soil, ¾-inch gravel, and/or trap rock screenings;
- General site work above the Site-Wide Cover System;
- NAPL recovery well weekly/monthly monitoring and monthly NAPL recovery; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Brookside & Eastern Manifests

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

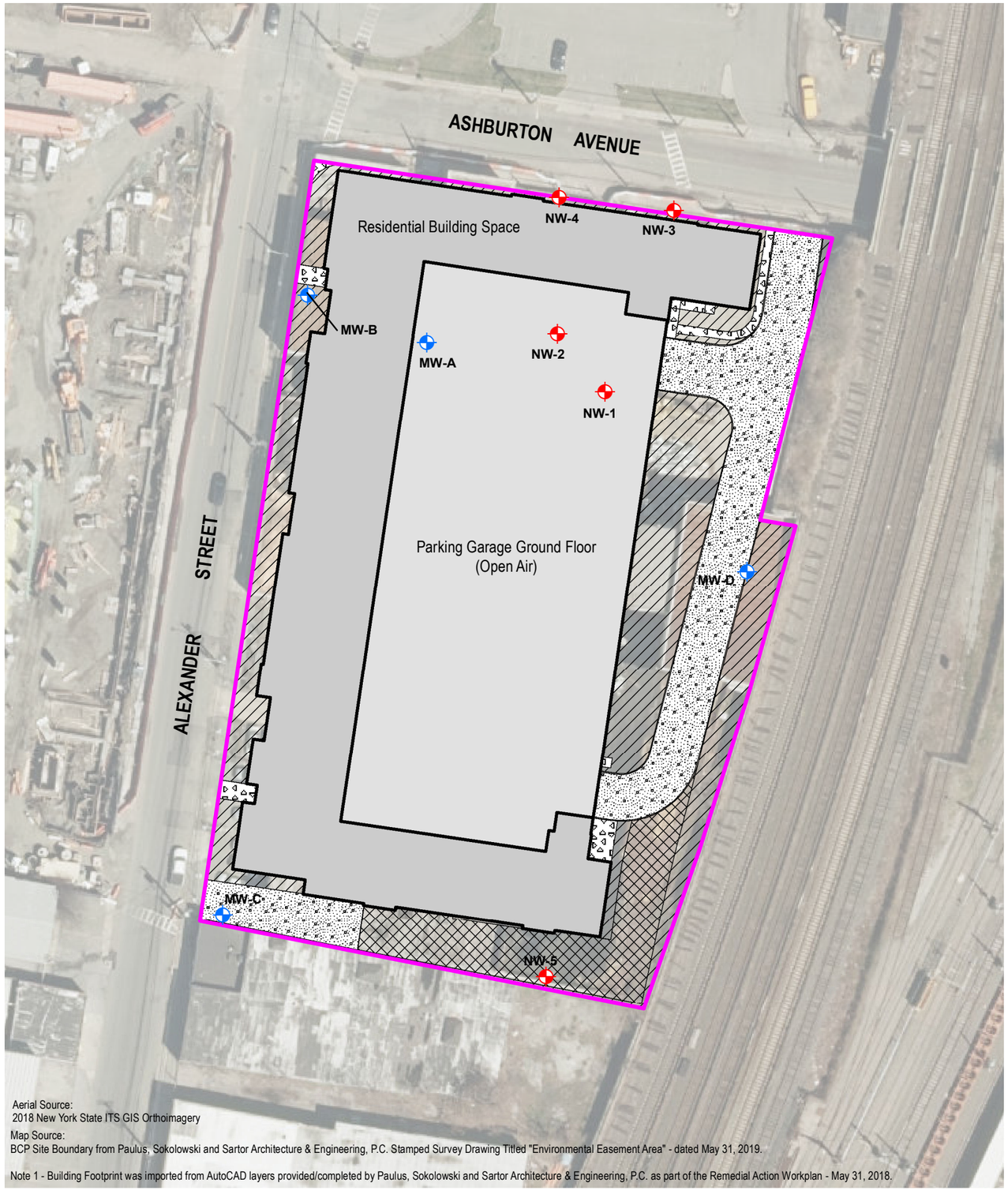
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	ND	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	Pending	Pending
Jun-20	NA	NA	10	10	NA	20	6/25/2020	Pending	Pending
				TOTAL TO DATE:		**142.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

ATTACHMENT A - BROOKSIDE AND EASTERN MANIFESTS

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not required	1	631-608-8810	52920-2481-E

GENERATOR

5. Generator's Name and Mailing Address
Avalon Yonkers Sun Sites LLC
1499 Post Road
Fairfield CT 06824
Generator's Phone: 201 694-3657

Generator's Site Address (if different than mailing address)
Polychrome East
60-94 Alexander Street
Yonkers NY 10701

6. Transporter 1 Company Name
Brookside Environmental, Inc.

U.S. EPA ID Number
NYR000081661

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Water of New York
3249 Richmond Terrace
Staten Island NY 10303
Facility's Phone: 718 981-4600

U.S. EPA ID Number
NYD000988545

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-regulated material, solid	001	DM	500	P	
2.	Non-regulated material, liquid	001	DM	55	G	
3.						
4.						

13. Special Handling Instructions and Additional Information
1) Used PPE and debris. Approval #237-257 2) Oily water. Approval # 237-238

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: X Mitchell | Signature | Month: 6 | Day: 12 | Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: X Nick Hobbes | Signature | Month: 6 | Day: 12 | Year: 20

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Alexian Acevedo | Signature | Month: 6 | Day: 23 | Year: 20

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address: AVALON ON SITES, 94 ALEXANDER ST., YONKERS NY

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: EASTERN ENVIRONMENTAL SOLUTIONS — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: CLEAN EARTH NJ, 524 RICHMOND TER, STATEN ISLAND NY — U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-RHZ OIL CONTAMINATED PPE	1	DM	70	PD	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Mitch Cain — Signature — Month: 6 — Day: 23 — Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Manuel K. DD — Signature — Month: 6 — Day: 23 — Year: 20

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

CC Labels • Printed in the USA 1-800-997-6966

GENERATOR'S/SHIPPER'S INITIAL COPY

Reorder Part# MANIFEST-CsNHWC 913-897-6966

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

August 18, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – July 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of July 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of July 2020.
- On July 15, 16, 26, and 27, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of July 2020, no on-Site excavation activities below the final cover system occurred.
- On July 8, and 22, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On July 15 and 26, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the July 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 7/8/20 (feet)	DNAPL Thickness 7/15/20 (feet)	DNAPL Thickness 7/22/20 (feet)	DNAPL Thickness 7/26/20 (feet)
NW-3	5.63	5.93	3.09	3.22
NW-4	2.08	2.70	0.76	0.87

Note: Measured DNAPL thicknesses are estimated.

- On July 14, 2020, AKRF collected imported fill samples at the A. Bulfamante Landscaping (a.k.a. "A. Bulfamante, Inc.") compost and topsoil facility, located at 311 Lincoln Avenue in Rye Brook, New York. AKRF collected one 5-point composite and one grab sample (both labeled as IMPORT-BULF-20200714) from an approximately 250 cubic yard dedicated topsoil stockpile. The results of this sampling event will be included in the August 2020 monthly report.
- On July 16 and 27, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~13 gallons total) and NW-4 (~8 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E6 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- On July 29, 2020, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the May and June 2020 DNAPL pumping events for off-site disposal at their facility in Flanders, New Jersey. The final hazardous waste disposal manifest is included in Attachment A and will be included in the PRR for 2020.
- A total of 21 gallons of DNAPL was recovered during the reporting period, and 163.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates to complete DNAPL gauging and removal in July 2020 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.
- No soil or stone was imported to the Site during the month of July.

The following work is planned for August 2020:

- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of twice per month; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – VES Manifest

cc (electronic copy only): Kevin Carpenter – NYSDEC
Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran – AVB
Christopher Reynolds – AVB
Jon Vogel – AVB
Michael Simpson – AVB
Barry White – AVB
Scott Caporizzo – AKRF
Marc Godick – AKRF
Steve Grens – AKRF
Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

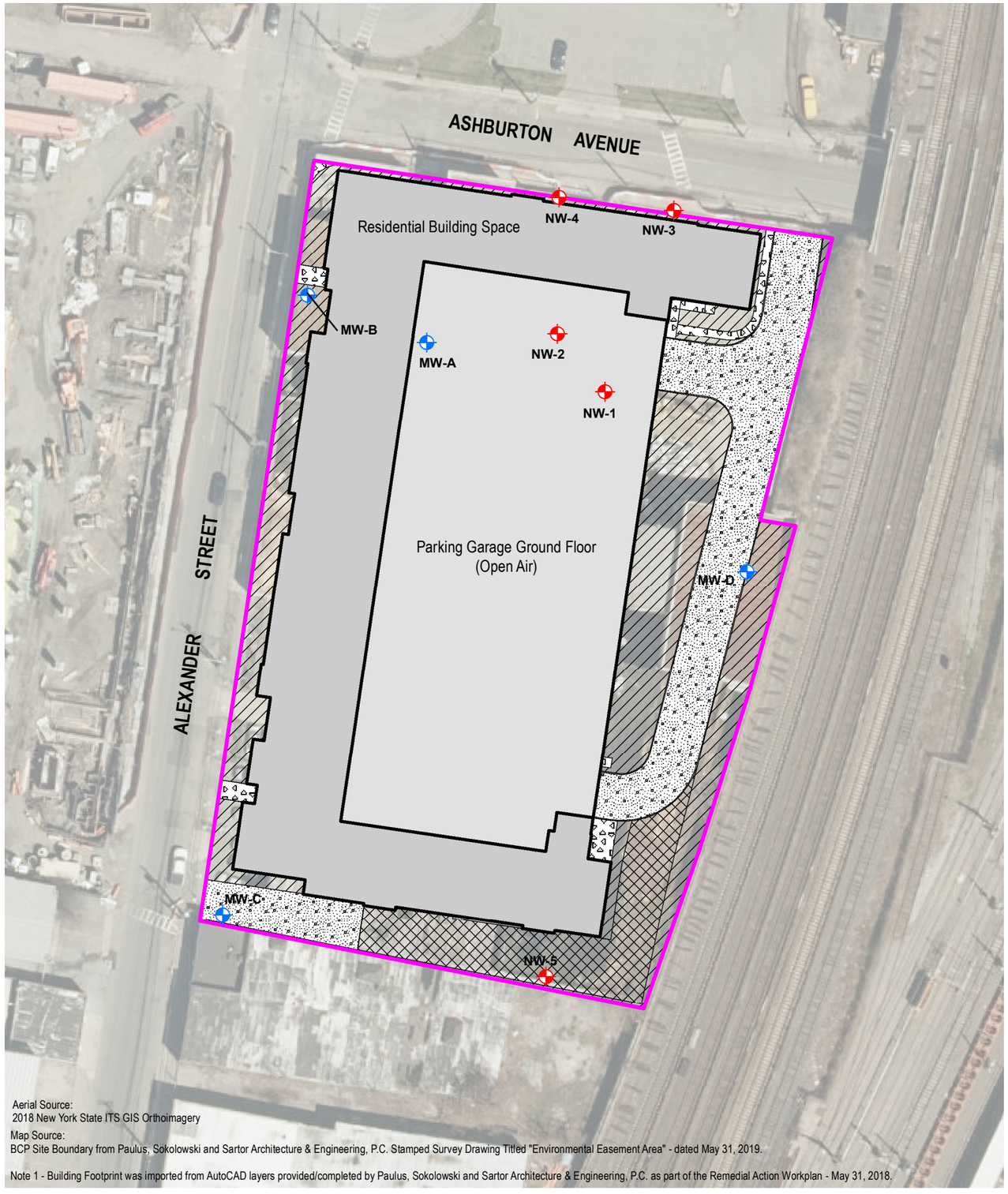
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.90	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	10:45	ND	8.49	17.18	20.27	NA	3.09	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**
	7/27/2020	**7:40**	**ND**	**8.45**	**ND**	**20.27**	**NA**	**NA**	**Post-pumping measurement (~8 gallons removed)**

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	**10:05**	**ND**	**10.02**	**16.90**	**19.60**	**NA**	**2.70**	**Pre-pumping measurement**
	7/16/2020	**9:15**	**ND**	**10.02**	**ND**	**19.43**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	11:00	ND	10.02	18.65	19.41	NA	0.76	
	7/26/2020	**12:11**	**ND**	**9.87**	**18.55**	**19.42**	**NA**	**0.87**	**Pre-pumping measurement**
	7/27/2020	**7:25**	**ND**	**9.88**	**ND**	**19.42**	**NA**	**NA**	**Post-pumping measurement (~3 gallons removed)**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/2720	Pending	Pending
				TOTAL TO DATE:		**163.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

ATTACHMENT A

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Shipping Document Tracking Number
	NYVSQG	1	(877) 818-0087	ZZ 00792987

5. Generator's Name and Mailing Address
ROBERT ACAMPORA
POLYCHROME EAST (BUILDING 3)
80-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 415-7399

Generator's Site Address (if different than mailing address)
SAME

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347-7111
U.S. EPA ID Number: NJD980536593

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Codes		
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, COAL TAR), 3, II	1	DM	400	P	D001	B	
						D018		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS -|- Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: R J Johnston
Signature:
Month: 07 Day: 29 Year: 20

16. International Shipments
☐ Import to U.S. ☐ Export from U.S.
Transporter signature (for exports only):
Port of entry/exit:
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Shipment

Transporter 1 Printed/Typed Name: Darryl Thomas
Signature:
Month: 07 Day: 29 Year: 20

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

18. Discrepancy

18a. Discrepancy Indication Space
☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Shipping Document Tracking Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a

Printed/Typed Name: Duncan Cammell
Signature:
Month: 07 Day: 29 Year: 20

DESIGNATED FACILITY TO GENERATOR

GENERATOR
INTL
TRANSPORTER
DESIGNATED FACILITY

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

September 30, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – August 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of August 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of August 2020.
- On August 6, 12, 13, 25, and 26, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of August 2020, no on-Site excavation activities below the final cover system occurred.
- On August 6, 12, and 26, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On August 12 and 25, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C (gauged on August 26, 2020), MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the August 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 8/6/20 (feet)	DNAPL Thickness 8/12/20 (feet)	DNAPL Thickness 8/26/20 (feet)
NW-3	3.32*	3.25	2.06
NW-4	0.48*	1.83	1.33

* - DNAPL thickness was estimated on August 6, 2020 as the well was in the process of being converted from a stick-up to flush-mounted well.
Note: Measured DNAPL thicknesses are estimated.

Note: Measured DNAPL thicknesses are estimated.

- On July 14, 2020, AKRF collected imported fill samples at the A. Bulfamante Landscaping (a.k.a. "A. Bulfamante, Inc.") compost and topsoil facility, located at 311 Lincoln Avenue in Rye Brook, New York. AKRF collected one 5-point composite and one grab sample (both labeled as IMPORT-BULF-20200714) from an approximately 250 cubic yard dedicated topsoil stockpile. The sample results were reported below the protection of groundwater and restricted residential soil clean-up objectives with the exception of acetone. Acetone is a common laboratory contaminant and not anticipated to be indicative of the imported fill. The VOC analysis was re-run, and the reported re-run VOC sample concentrations had no exceedances of either criteria. The analytical results are summarized in Tables 3A through 3E. An associated import request submittal (Import Request Submittal #7) was submitted to NYSDEC on August 14, 2020, requesting import of 200-300 cubic yards of top soil. Based on the analytical data, NYSDEC approved the request the same day.

- On August 13 and 26, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~6.5 gallons total) and NW-4 (~6.5 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.

- On August 26, 2020, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the July and August 2020 DNAPL pumping events for off-site disposal at their facility in Flanders, New Jersey. The final hazardous waste disposal manifest is included in Attachment A and will be included in the PRR for 2020.

- A total of 13 gallons of DNAPL was recovered during the reporting period, and 176.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.

- AKRF anticipates to complete DNAPL gauging and removal in September 2020 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

- During the month of August 2020, 8.16 tons of ¾-inch stone was imported to the Site from Tilcon West Nyack Quarry, an NYSDEC-approved source, and used for backfill and general grading on the eastern portion of the Site. Approved import material tickets will be included in the PRR for 2020.

The following work is planned for September 2020:

- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of twice per month; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Table 3A to 3E – Imported Topsoil Results – July 2020
Attachment A – VES Manifest

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

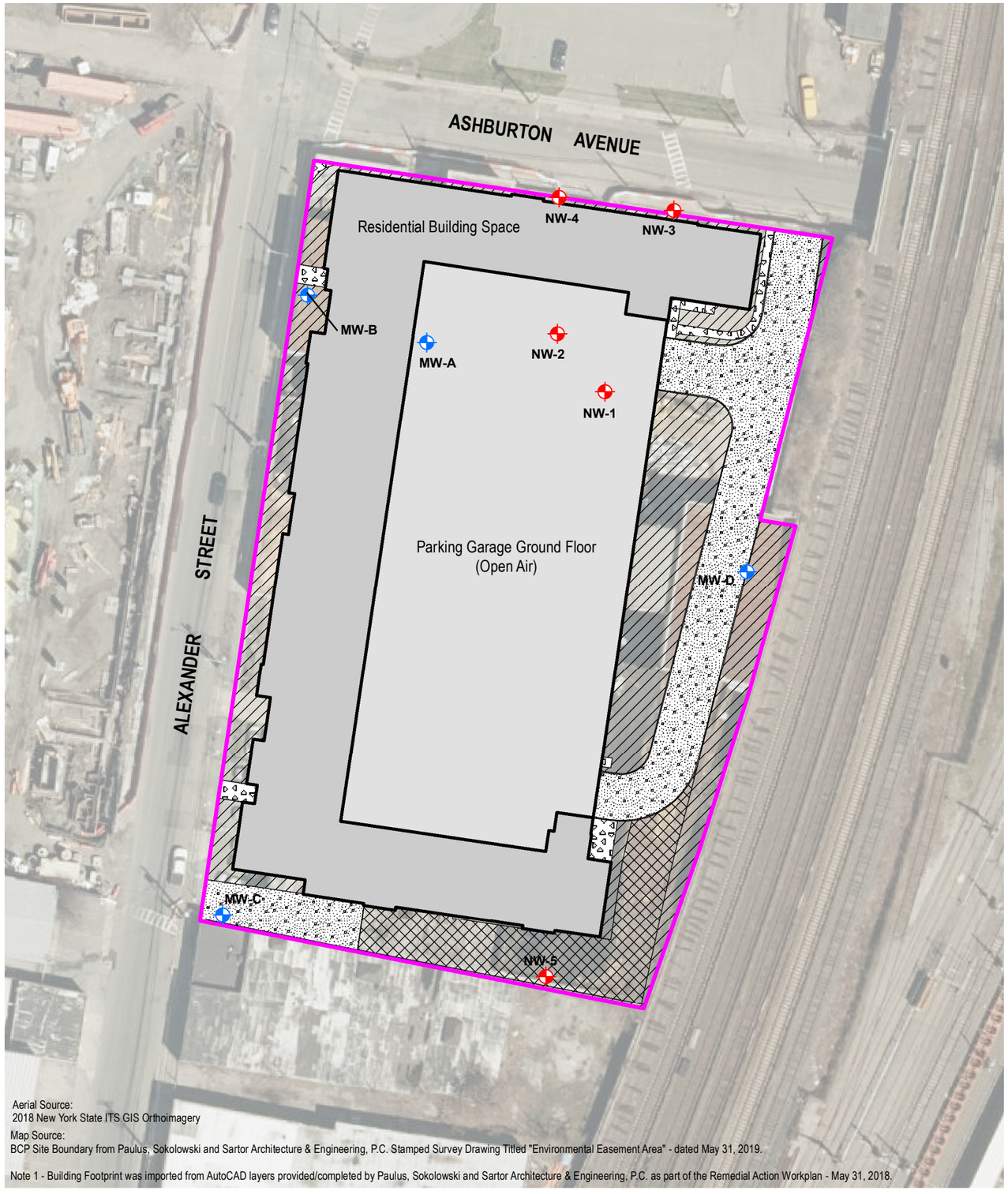
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	
	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	**10:45**	**ND**	**8.49**	**17.18**	**20.27**	**NA**	**3.09**	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**
	7/27/2020	**7:40**	**ND**	**8.45**	**ND**	**20.27**	**NA**	**NA**	**Post-pumping measurement (~8 gallons removed)**
	8/6/2020	**10:30**	**ND**	**7.50**	**16.95**	**20.27***	**NA**	**3.32***	Well in process of being converted to flush mount, change in height. **<u>* = ESTIMATED</u>**
	8/12/2020	10:46	ND	6.33	15.02	18.27	NA	3.25	**Pre-pumping measurement**
	8/13/2020	**7:50**	**ND**	**6.36**	**ND**	**18.27**	**NA**	**NA**	**Post-pumping measurement (~4 gal removed)**
	8/26/2020	**7:45**	**ND**	**6.41**	**16.85**	**18.91**	**NA**	**2.06**	**Pre-pumping measurement**
	8/26/2020	7:50	ND	8.90	ND	18.87	NA	NA	**Post-pumping measurement (~2.5 gal removed)**

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	**10:05**	**ND**	**10.02**	**16.90**	**19.60**	**NA**	**2.70**	**Pre-pumping measurement**
	7/16/2020	**9:15**	**ND**	**10.02**	**ND**	**19.43**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	**11:00**	**ND**	**10.02**	**18.65**	**19.41**	**NA**	**0.76**	
	7/26/2020	**12:11**	**ND**	**9.87**	**18.55**	**19.42**	**NA**	**0.87**	**Pre-pumping measurement**
	7/27/2020	**7:25**	**ND**	**9.88**	**ND**	**19.42**	**NA**	**NA**	**Post-pumping measurement (~3 gallons removed)**
	8/6/2020	**10:50**	**ND**	**9.58**	**18.94**	**19.42***	**NA**	**0.48***	Well in process of being converted to flush mount, change in height. **<u>* = ESTIMATED</u>**
	8/12/2020	10:40	ND	7.52	15.26	17.09	NA	1.83	**Pre-pumping measurement**
	8/13/2020	**7:15**	**ND**	**7.35**	**ND**	**17.09**	**NA**	**NA**	**Post-pumping measurement (~4 gal removed)**
	8/26/2020	**7:30**	**ND**	**6.36**	**16.71**	**18.03**	**NA**	**1.33**	**Pre-pumping measurement**
	8/26/2020	7:40	ND	8.73	ND	18.07	NA	NA	**Post-pumping measurement (~2.5 -gal removed)**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
				TOTAL TO DATE:		**176.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

Table 3A
Polychrome East
Yonkers, New York
Imported Topsoil Analytical Results
Volatile Organic Compounds (VOCs)

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Restricted Residential SCO mg/kg	NYSDEC Part 375 Protection of Groundwater SCO mg/kg	IMPORT-BULF-20200714 L2029616-01 7/14/2020	IMPORT-BULF-20200714 L2029616-01 R1 7/14/2020
1,1,1,2-Tetrachloroethane	NS	NS	ND	ND
1,1,1-Trichloroethane	100	0.68	ND	ND
1,1,2,2-Tetrachloroethane	NS	NS	ND	ND
1,1,2-Trichloroethane	NS	NS	ND	ND
1,1-Dichloroethane	26	0.27	ND	ND
1,1-Dichloroethene	100	0.33	ND	ND
1,1-Dichloropropene	NS	NS	ND	ND
1,2,3-Trichlorobenzene	NS	NS	ND	ND
1,2,3-Trichloropropane	NS	NS	ND	ND
1,2,4,5-Tetramethylbenzene	NS	NS	ND	ND
1,2,4-Trichlorobenzene	NS	NS	ND	ND
1,2,4-Trimethylbenzene	52	3.6	ND	ND
1,2-Dibromo-3-chloropropane	NS	NS	ND	ND
1,2-Dibromoethane	NS	NS	ND	ND
1,2-Dichlorobenzene	100	1.1	ND	ND
1,2-Dichloroethane	3.1	0.02	ND	ND
1,2-Dichloroethene, Total	NS	NS	ND	ND
1,2-Dichloropropane	NS	NS	ND	ND
1,3,5-Trimethylbenzene	52	8.4	ND	ND
1,3-Dichlorobenzene	49	2.4	ND	ND
1,3-Dichloropropane	NS	NS	ND	ND
1,3-Dichloropropene, Total	NS	NS	ND	ND
1,4-Dichlorobenzene	13	1.8	ND	ND
1,4-Dioxane	13	0.1	ND	ND
2,2-Dichloropropane	NS	NS	ND	ND
2-Butanone	100	0.12	0.013 J	0.0035 J
2-Hexanone	NS	NS	ND	ND
4-Methyl-2-pentanone	NS	NS	ND	ND
Acetone	100	0.05	0.084	0.045
Acrylonitrile	NS	NS	ND	ND
Benzene	4.8	0.06	ND	ND
Bromobenzene	NS	NS	ND	ND
Bromochloromethane	NS	NS	ND	ND
Bromodichloromethane	NS	NS	ND	ND
Bromoform	NS	NS	ND	ND
Bromomethane	NS	NS	ND	ND
Carbon disulfide	NS	NS	ND	ND
Carbon tetrachloride	2.4	0.76	ND	ND
Chlorobenzene	100	1.1	ND	ND
Chloroethane	NS	NS	ND	ND
Chloroform	49	0.37	ND	ND
Chloromethane	NS	NS	ND	ND
cis-1,2-Dichloroethene	100	0.25	ND	ND
cis-1,3-Dichloropropene	NS	NS	ND	ND
Dibromochloromethane	NS	NS	ND	ND
Dibromomethane	NS	NS	ND	ND
Dichlorodifluoromethane	NS	NS	ND	ND
Ethyl ether	NS	NS	ND	ND
Ethylbenzene	41	1	ND	ND
Hexachlorobutadiene	NS	NS	ND	ND
Isopropylbenzene	NS	NS	ND	ND
Methyl tert butyl ether	100	0.93	ND	ND
Methylene chloride	100	0.05	ND	ND
Naphthalene	100	12	ND	ND
n-Butylbenzene	100	12	ND	ND
n-Propylbenzene	100	3.9	ND	ND
o-Chlorotoluene	NS	NS	ND	ND
o-Xylene	NS	NS	ND	ND
p/m-Xylene	NS	NS	ND	ND
p-Chlorotoluene	NS	NS	ND	ND
p-Diethylbenzene	NS	NS	ND	ND
p-Ethyltoluene	NS	NS	ND	ND
p-Isopropyltoluene	NS	NS	0.0013 J	0.0042
sec-Butylbenzene	100	11	ND	ND
Styrene	NS	NS	ND	ND
tert-Butylbenzene	100	5.9	ND	ND
Tetrachloroethene	19	1.3	ND	ND
Toluene	100	0.7	ND	ND
trans-1,2-Dichloroethene	100	0.19	ND	ND
trans-1,3-Dichloropropene	NS	NS	ND	ND
trans-1,4-Dichloro-2-butene	NS	NS	ND	ND
Trichloroethene	21	0.47	ND	ND
Trichlorofluoromethane	NS	NS	ND	ND
Vinyl acetate	NS	NS	ND	ND
Vinyl chloride	0.9	0.02	ND	ND
Xylenes, Total	100	1.6	ND	ND
Total VOCs	NS	NS	0.0983	0.0527

Table 3B
Polychrome East
Yonkers, New York
Imported Topsoil Analytical Results
Semivolatile Organic Compounds (SVOCs)

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Restricted Residential SCO mg/kg	NYSDEC Part 375 Protection of Groundwater SCO mg/kg	IMPORT-BULF-20200714 L2029616-01 7/14/2020
1,2,4,5-Tetrachlorobenzene	NS	NS	ND
1,2,4-Trichlorobenzene	NS	NS	ND
1,2-Dichlorobenzene	100	1.1	ND
1,3-Dichlorobenzene	49	2.4	ND
1,4-Dichlorobenzene	13	1.8	ND
1,4-Dioxane	13	0.1	ND
2,4,5-Trichlorophenol	NS	NS	ND
2,4,6-Trichlorophenol	NS	NS	ND
2,4-Dichlorophenol	NS	NS	ND
2,4-Dimethylphenol	NS	NS	ND
2,4-Dinitrophenol	NS	NS	ND
2,4-Dinitrotoluene	NS	NS	ND
2,6-Dinitrotoluene	NS	NS	ND
2-Chloronaphthalene	NS	NS	ND
2-Chlorophenol	NS	NS	ND
2-Methylnaphthalene	NS	NS	ND
2-Methylphenol	100	0.33	ND
2-Nitroaniline	NS	NS	ND
2-Nitrophenol	NS	NS	ND
3,3'-Dichlorobenzidine	NS	NS	ND
3-Methylphenol/4-Methylphenol	NS	NS	ND
3-Nitroaniline	NS	NS	ND
4,6-Dinitro-o-cresol	NS	NS	ND
4-Bromophenyl phenyl ether	NS	NS	ND
4-Chloroaniline	NS	NS	ND
4-Chlorophenyl phenyl ether	NS	NS	ND
4-Nitroaniline	NS	NS	ND
4-Nitrophenol	NS	NS	ND
Acenaphthene	100	98	0.037 J
Acenaphthylene	100	107	ND
Acetophenone	NS	NS	ND
Anthracene	100	1,000	0.1 J
Benzo(a)anthracene	1	1	0.31
Benzo(a)pyrene	1	22	0.25
Benzo(b)fluoranthene	1	1.7	0.38
Benzo(ghi)perylene	100	1,000	0.17
Benzo(k)fluoranthene	3.9	1.7	0.084 J
Benzoic Acid	NS	NS	ND
Benzyl Alcohol	NS	NS	ND
Biphenyl	NS	NS	ND
Bis(2-chloroethoxy)methane	NS	NS	ND
Bis(2-chloroethyl)ether	NS	NS	ND
Bis(2-chloroisopropyl)ether	NS	NS	ND
Bis(2-ethylhexyl)phthalate	NS	NS	ND
Butyl benzyl phthalate	NS	NS	ND
Carbazole	NS	NS	0.064 J
Chrysene	3.9	1	0.26
Dibenzo(a,h)anthracene	0.33	1,000	0.041 J
Dibenzofuran	59	210	0.028 J
Diethyl phthalate	NS	NS	ND
Dimethyl phthalate	NS	NS	ND
Di-n-butylphthalate	NS	NS	ND
Di-n-octylphthalate	NS	NS	ND
Fluoranthene	100	1,000	0.6
Fluorene	100	386	0.042 J
Hexachlorobenzene	1.2	3.2	ND
Hexachlorobutadiene	NS	NS	ND
Hexachlorocyclopentadiene	NS	NS	ND
Hexachloroethane	NS	NS	ND
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.18
Isophorone	NS	NS	ND
Naphthalene	100	12	ND
NDPA/DPA	NS	NS	ND
Nitrobenzene	NS	NS	ND
n-Nitrosodi-n-propylamine	NS	NS	ND
p-Chloro-m-cresol	NS	NS	ND
Pentachlorophenol	6.7	0.8	ND
Phenanthrene	100	1,000	0.46
Phenol	100	0.33	ND
Pyrene	100	1,000	0.5
Total SVOCs	NS	NS	3.506

Table 3C
Polychrome East
Yonkers, New York
Imported Topsoil Analytical Results
Metals

Client ID Lab Sample ID Date Sampled Dilution Analyte	NYSDEC Part 375 Restricted Residential SCO mg/kg	NYSDEC Part 375 Protection of Groundwater SCO mg/kg	IMPORT-BULF-20200714 L2029616-01 7/14/2020 1/2 †
Aluminum, Total	**NS**	**NS**	10,200
Antimony, Total	**NS**	**NS**	ND
Arsenic, Total	**16**	**16**	5.84
Barium, Total	**400**	**820**	90.3
Beryllium, Total	**72**	**47**	ND
Cadmium, Total	**4.3**	**7.5**	0.642 J
Calcium, Total	**NS**	**NS**	24,700
Chromium, Total	**180*** **	**NS*** **	21.5
Cobalt, Total	**NS**	**NS**	7.75
Copper, Total	**270**	**1,720**	20
Cyanide, Total	**27**	**40**	ND
Iron, Total	**NS**	**NS**	16,500
Lead, Total	**400**	**450**	32.8
Magnesium, Total	**NS**	**NS**	15,800
Manganese, Total	**2,000**	**2,000**	327
Mercury, Total	**0.81**	**0.73**	ND
Nickel, Total	**310**	**130**	13.8
Potassium, Total	**NS**	**NS**	2,210
Selenium, Total	**180**	**4**	0.524 J
Silver, Total	**180**	**8.3**	ND
Sodium, Total	**NS**	**NS**	145 J
Thallium, Total	**NS**	**NS**	ND
Vanadium, Total	**NS**	**NS**	28
Zinc, Total	**10,000**	**2,480**	67

Table 3D
Polychrome East
Yonkers, New York

Imported Topsoil Analytical Results

Polychlorinated Biphenyls (PCBs), Pesticides, and Herbicides

Client ID Lab Sample ID Date Sampled PCBs	NYSDEC Part 375 Restricted Residential SCO mg/kg	NYSDEC Part 375 Protection of Groundwater SCO mg/kg	IMPORT-BULF-20200714 L2029616-01 7/14/2020
Aroclor 1016	NS	NS	ND
Aroclor 1221	NS	NS	ND
Aroclor 1232	NS	NS	ND
Aroclor 1242	NS	NS	ND
Aroclor 1248	NS	NS	ND
Aroclor 1254	NS	NS	ND
Aroclor 1260	NS	NS	ND
Aroclor 1262	NS	NS	ND
Aroclor 1268	NS	NS	ND
PCBs, Total	1	3.2	ND

Pesticides	mg/kg	mg/kg	
4,4'-DDD	13	14	0.00384
4,4'-DDE	8.9	17	0.0326
4,4'-DDT	7.9	136	0.0357
Aldrin	0.097	0.19	0.00232 P
Alpha-BHC	0.48	0.02	ND
Beta-BHC	0.36	0.09	ND
Chlordane	NS	NS	0.603
cis-Chlordane	4.2	2.9	0.108
Delta-BHC	100	0.25	ND
Dieldrin	0.2	0.1	0.00507
Endosulfan I	NS	102	ND
Endosulfan II	NS	102	ND
Endosulfan sulfate	NS	1,000	ND
Endosulfans, ABS	24	NS	ND
Endrin	11	0.06	ND
Endrin aldehyde	NS	NS	ND
Endrin ketone	NS	NS	ND
Heptachlor	2.1	0.38	0.0014
Heptachlor epoxide	NS	NS	0.00856 IP
Lindane	1.3	0.1	ND
Methoxychlor	NS	NS	ND
Toxaphene	NS	NS	ND
trans-Chlordane	NS	NS	0.0565 IP

Herbicides	mg/kg	mg/kg	
2,4-D	NS	NS	ND
2,4,5-T	NS	NS	ND
2,4,5-TP (Silvex)	100	3.8	ND

Table 3E
Polychrome East
Yonkers, New York
Imported Topsoil Analytical Results
Per- and Polyfluoroalkyl Substances (PFAS)

Client ID Lab Sample ID Date Sampled Analyte	NYSDEC Part 375 Restricted Residential SCO mg/kg	NYSDEC Part 375 Protection of Groundwater SCO mg/kg	IMPORT-BULF-20200714 L2029613-01 7/14/2020
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000573 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000573 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000573 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000573 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000573 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000065 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000573 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000078 J
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000573 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000573 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000053 J
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000573 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000104 J
Perfluorononanoic Acid (PFNA)	NS	NS	0.000573 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000573 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000517 J
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000251 J
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000074 J
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000573 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000573 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000075 JF
PFOA/PFOS, Total	NS	NS	0.000768 J

Tables 3A-3E
Polychrome East
Yonkers, New York
Imported Topsoil Analytical Results
Notes

DEFINITIONS

F	:	The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
I	:	Matrix interference.
J	:	The concentration given is an estimated value.
ND	:	The sample was not detected above the laboratory reporting limit.
NS	:	No standard.
P	:	Indicates a pesticide/aroclor target analyte had a percent difference greater than 25% between the two gc columns. The lower of the two results is reported.
U	:	The analyte was not detected at the indicated concentration.
*******	:	Standard reflects trivalent, not total, Chromium.
†	:	Dilution factor varies.
mg/kg	:	milligrams per kilogram

STANDARDS

Part 375 Soil Cleanup Objectives	:	Soil Cleanup Objectives listed in New York State Department of Environmental Conservation (NYSDEC) "Part 375" Regulations [6 New York Codes, Rules and Regulations (NYCRR) Part 375].

Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in bold font.
Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted in gray shading.

ATTACHMENT A

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Shipping Document Tracking Number
	NYV8QG	1	(877) 812-0087	ZZ 00852505

5. Generator's Name and Mailing Address
ROBERT ACAMPORA
POLYCHROME EAST (BUILDING 3)
90-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 415-7309

Generator's Site Address (if different than mailing address)
SAME

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD980631369

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347-7111
U.S. EPA ID Number: NJD980536593

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Codes		
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, n.o.s., (BENZENE, COAL TAR), 3, II	1	DM	400	P	D001	D018	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: A William Jacobsen
Signature:
Month Day Year: 08 26 20

16. International Shipments
☐ Import to U.S. ☐ Export from U.S.
Transporter signature (for exports only):
Port of entry/exit:
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Shipment

Transporter 1 Printed/Typed Name: Kevin Patel
Signature:
Month Day Year: 08 26 20

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year:

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator)
Shipping Document Tracking Number:
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year:

19. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a
Printed/Typed Name: Dennis Connell
Signature:
Month Day Year: 08 26 20

DESIGNATED FACILITY TO GENERATOR

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

October 28, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – September 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of August 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of August 2020.
- On September 10, 11, 23, and 24, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of September 2020, no on-Site excavation activities below the final cover system occurred.
- On September 10, and 23, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On September 10 and 23, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the September 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 9/10/20 (feet)	DNAPL Thickness 9/23/20 (feet)
NW-3	2.16	1.91
NW-4	1.26	1.16

Note: Measured DNAPL thicknesses are estimated.

- On September 11 and 24, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~10 gallons total) and NW-4 (~10 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of 20 gallons of DNAPL was recovered during the reporting period, and 196.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates to complete DNAPL gauging and removal in October 2020 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for October 2020:

- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of twice per month; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

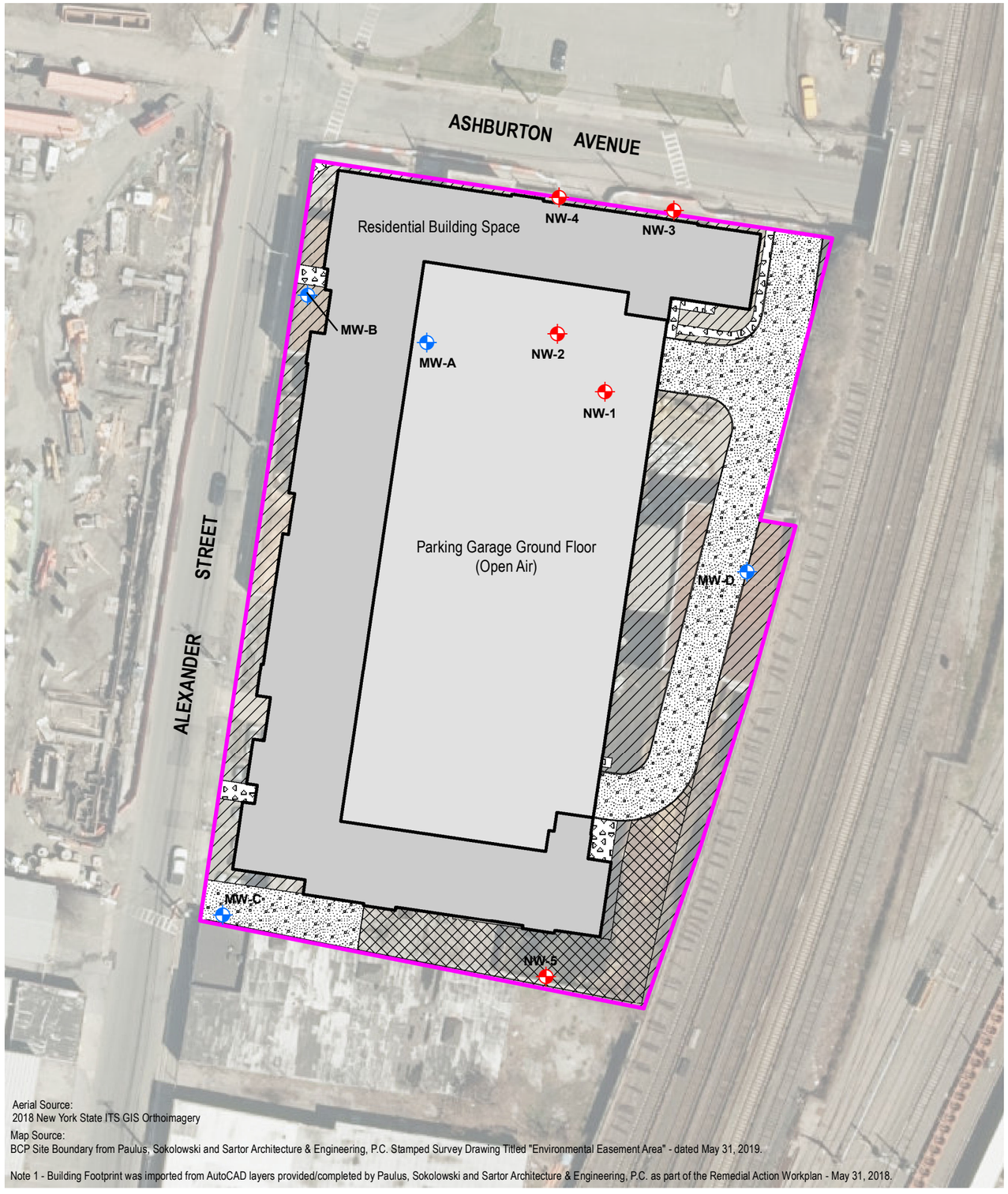
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
	9/10/2020	7:30	ND	9.64	ND	15.54	NA	NA	
	9/23/2020	7:15	ND	10.21	ND	15.58	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
	9/10/2020	7:35	ND	8.80	ND	18.78	NA	NA	
	9/23/2020	7:20	ND	9.19	ND	18.83	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
	9/10/2020	7:45	ND	6.44	ND	13.89	NA	NA	
	9/23/2020	7:25	ND	7.26	ND	13.90	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
	9/10/2020	7:55	ND	7.75	ND	15.63	NA	NA	
	9/23/2020	7:35	ND	8.18	ND	15.69	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	
	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
	9/10/2020	9:20	ND	9.18	ND	26.96	NA	NA	
	9/23/2020	8:30	ND	9.62	ND	26.99	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
	9/10/2020	9:25	ND	9.11	ND	24.53	NA	NA	
	9/23/2020	8:35	ND	9.36	ND	24.68	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement. ~6 gallons pumped.**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3 (Cont.)	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	**10:45**	**ND**	**8.49**	**17.18**	**20.27**	**NA**	**3.09**	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**
	7/27/2020	**7:40**	**ND**	**8.45**	**ND**	**20.27**	**NA**	**NA**	**Post-pumping measurement (~8 gallons removed)**
	8/6/2020	**10:30**	**ND**	**7.50**	**16.95**	**20.27***	**NA**	**3.32***	**Well in process of being converted to flush mount, change in height. * = ESTIMATED**
	8/12/2020	10:46	ND	6.33	15.02	18.27	NA	3.25	Pre-pumping measurement
	8/13/2020	**7:50**	**ND**	**6.36**	**ND**	**18.27**	**NA**	**NA**	**Post-pumping measurement (~4 gal removed)**
	8/26/2020	**7:45**	**ND**	**6.41**	**16.85**	**18.91**	**NA**	**2.06**	**Pre-pumping measurement**
	8/26/2020	7:50	ND	8.90	ND	18.87	NA	NA	Post-pumping measurement (~2.5 gal removed)
	9/10/2020	**10:45**	**ND**	**7.40**	**16.30**	**18.46**	**NA**	**2.16**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:45**	**ND**	**6.45**	**ND**	**18.55**	**NA**	**NA**	**Post-pumping measurement (~2.5 -gal removed)**
	9/23/2020	**9:30**	**ND**	**6.37**	**16.55**	**18.46**	**NA**	**1.91**	**Pre-pumping measurement**
	9/24/2020	**7:45**	**ND**	**6.45**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement (~7.5 -gal removed)**
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement. ~10 gallons pumped.**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement.**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement- Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed** (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement (~10 gallons removed)**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	**10:05**	**ND**	**10.02**	**16.90**	**19.60**	**NA**	**2.70**	**Pre-pumping measurement**
	7/16/2020	**9:15**	**ND**	**10.02**	**ND**	**19.43**	**NA**	**NA**	**Post-pumping measurement (~5 gallons removed)**
	7/22/2020	**11:00**	**ND**	**10.02**	**18.65**	**19.41**	**NA**	**0.76**	
	7/26/2020	**12:11**	**ND**	**9.87**	**18.55**	**19.42**	**NA**	**0.87**	**Pre-pumping measurement**
	7/27/2020	**7:25**	**ND**	**9.88**	**ND**	**19.42**	**NA**	**NA**	**Post-pumping measurement (~3 gallons removed)**
	8/6/2020	**10:50**	**ND**	**9.58**	**18.94**	**19.42***	**NA**	**0.48***	**Well in process of being converted to flush mount, change in height. * = ESTIMATED**
	8/12/2020	**10:40**	**ND**	**7.52**	**15.26**	**17.09**	**NA**	**1.83**	**Pre-pumping measurement**
	8/13/2020	**7:15**	**ND**	**7.35**	**ND**	**17.09**	**NA**	**NA**	**Post-pumping measurement (~4 gal removed)**
	8/26/2020	**7:30**	**ND**	**6.36**	**16.71**	**18.03**	**NA**	**1.33**	**Pre-pumping measurement**
	8/26/2020	**7:40**	**ND**	**8.73**	**ND**	**18.07**	**NA**	**NA**	**Post-pumping measurement (~2.5 -gal removed)**
	9/10/2020	**11:00**	**ND**	**7.42**	**15.85**	**17.11**	**NA**	**1.26**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:30**	**ND**	**7.48**	**ND**	**17.24**	**NA**	**NA**	**Post-pumping measurement (~2.5 -gal removed)**
	9/23/2020	**9:50**	**ND**	**7.59**	**15.95**	**17.11**	**NA**	**1.16**	**Pre-pumping measurement**
	9/24/2020	**7:30**	**ND**	**7.74**	**ND**	**17.30**	**NA**	**NA**	**Post-pumping measurement (~7.5 -gal removed)**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	
	9/10/2020	9:15	ND	10.02	ND	12.91	NA	NA	
	9/23/2020	8:15	ND	10.38	ND	13.01	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
Sep-20	NA	NA	10	10	NA	20	9/11 and 9/24	10/8/2020	Veolia ES
				TOTAL TO DATE:		**196.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

Environmental, Planning, and Engineering Consultants
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November 24, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – October 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of October 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of October 2020.
- On October 7, 14, and 21, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of October 2020, no on-Site excavation activities below the final cover system occurred.
- On October 6, 2020 the United States Environmental Protection Agency (EPA) assigned the Site EPA ID NYR000247510 due to the ongoing handling and off-site disposal of the on-Site DNAPL coal tar as hazardous waste.
- On October 7, and 21, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On October 7, and 21, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the October 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 10/7/20 (feet)	DNAPL Thickness 10/21/20 (feet)
NW-3	2.57	3.59
NW-4	1.02	0.11

Note: Measured DNAPL thicknesses are estimated.

- Due to ongoing driveway work preventing on-Site access to the DNAPL recovery wells by vacuum truck, the October 8, 2020 DNAPL removal event was rescheduled to October 14, 2020.
- On October 14 and 21, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~9 gallons total) and NW-4 (~4 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. DNAPL was only removed at NW-4 on October 14, 2020 less than 0.5 feet of DNAPL was detected with the oil/water interface probe during the October 21, 2020 gauging event (as shown on Table 1). The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- On October 21, 2020, Eastern removed one drum of used PPE and oily debris generated during previous DNAPL recovery events. The drum was disposed of at Clean Waters of New York in Staten Island, New York. The non-hazardous waste manifest is included in Attachment A and will be included in the PRR for 2020.
- A total of 13 gallons of DNAPL was recovered during the reporting period, and 209.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates to complete DNAPL gauging and removal in November 2020 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for November 2020:

- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of twice per month; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Eastern Manifest

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

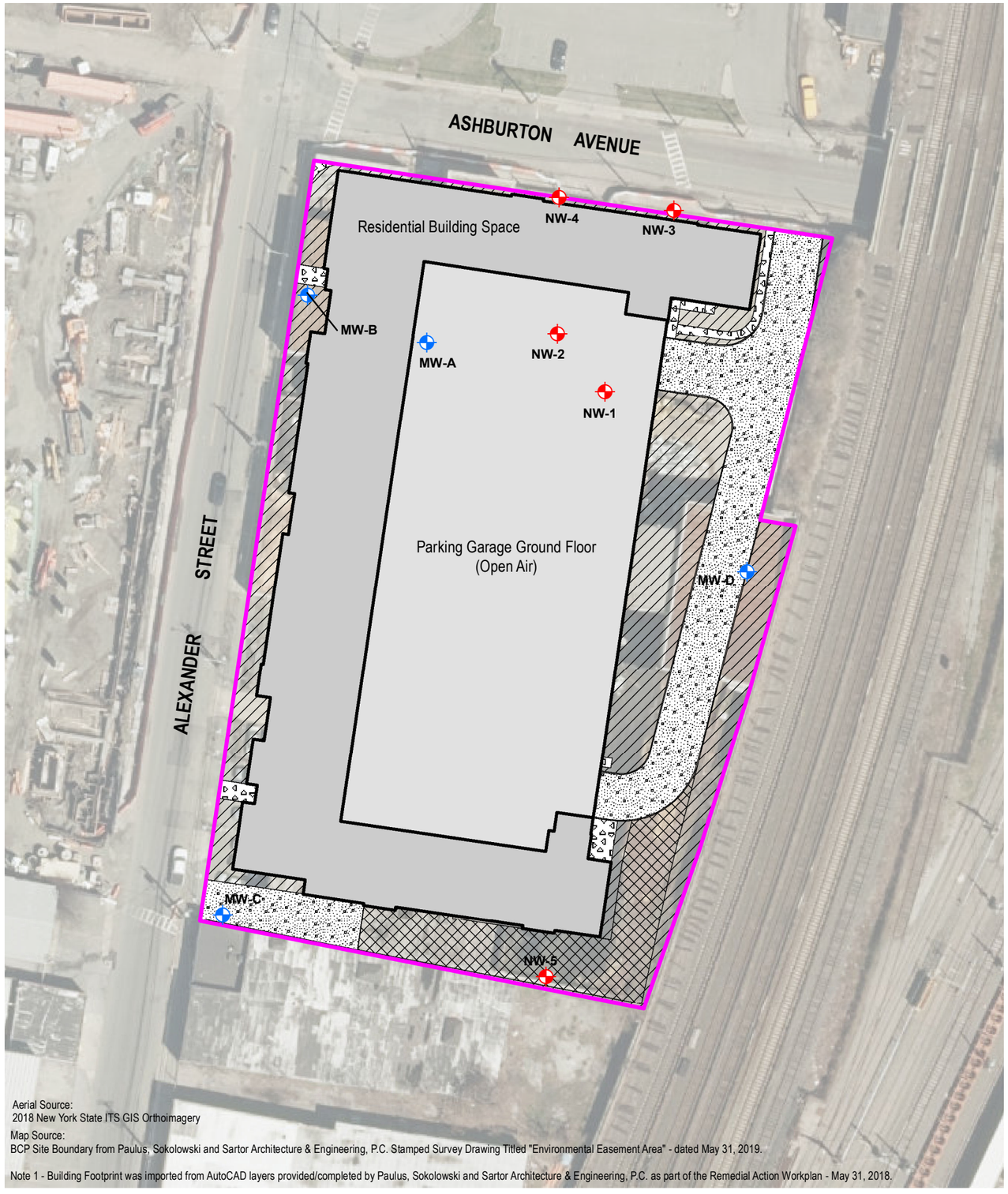
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
	9/10/2020	7:30	ND	9.64	ND	15.54	NA	NA	
	9/23/2020	7:15	ND	10.21	ND	15.58	NA	NA	
	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
	9/10/2020	7:35	ND	8.80	ND	18.78	NA	NA	
	9/23/2020	7:20	ND	9.19	ND	18.83	NA	NA	
	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
	9/10/2020	7:45	ND	6.44	ND	13.89	NA	NA	
	9/23/2020	7:25	ND	7.26	ND	13.90	NA	NA	
	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
	9/10/2020	7:55	ND	7.75	ND	15.63	NA	NA	
	9/23/2020	7:35	ND	8.18	ND	15.69	NA	NA	
	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	
	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
	9/10/2020	9:20	ND	9.18	ND	26.96	NA	NA	
	9/23/2020	8:30	ND	9.62	ND	26.99	NA	NA	
	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
	9/10/2020	9:25	ND	9.11	ND	24.53	NA	NA	
	9/23/2020	8:35	ND	9.36	ND	24.68	NA	NA	
	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement ~6 gallons removed**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)**
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	7/22/2020	10:45	ND	8.49	17.18	20.27	NA	3.09	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**
	7/27/2020	**7:40**	**ND**	**8.45**	**ND**	**20.27**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	8/6/2020	**10:30**	**ND**	**7.50**	**16.95**	**20.27***	**NA**	**3.32***	**Well in process of being converted to flush mount, change in height. * = ESTIMATED**
	8/12/2020	**10:46**	**ND**	**6.33**	**15.02**	**18.27**	**NA**	**3.25**	**Pre-pumping measurement**
	8/13/2020	**7:50**	**ND**	**6.36**	**ND**	**18.27**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	8/26/2020	**7:45**	**ND**	**6.41**	**16.85**	**18.91**	**NA**	**2.06**	**Pre-pumping measurement**
	8/26/2020	**7:50**	**ND**	**8.90**	**ND**	**18.87**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/10/2020	**10:45**	**ND**	**7.40**	**16.30**	**18.46**	**NA**	**2.16**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:45**	**ND**	**6.45**	**ND**	**18.55**	**NA**	**NA**	**Post-pumping measurement ~2.5 -gallons removed**
	9/23/2020	**9:30**	**ND**	**6.37**	**16.55**	**18.46**	**NA**	**1.91**	**Pre-pumping measurement**
	9/24/2020	**7:45**	**ND**	**6.45**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement ~7.5 -gallons removed**
	10/7/2020	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.4**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement ~10 gallons removed**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement - Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)**
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	**10:05**	**ND**	**10.02**	**16.90**	**19.60**	**NA**	**2.70**	**Pre-pumping measurement**
	7/16/2020	**9:15**	**ND**	**10.02**	**ND**	**19.43**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	7/22/2020	**11:00**	**ND**	**10.02**	**18.65**	**19.41**	**NA**	**0.76**	
	7/26/2020	**12:11**	**ND**	**9.87**	**18.55**	**19.42**	**NA**	**0.87**	**Pre-pumping measurement**
	7/27/2020	**7:25**	**ND**	**9.88**	**ND**	**19.42**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	8/6/2020	10:50	ND	9.58	18.94	19.42*	NA	0.48*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	**10:40**	**ND**	**7.52**	**15.26**	**17.09**	**NA**	**1.83**	**Pre-pumping measurement**
	8/13/2020	**7:15**	**ND**	**7.35**	**ND**	**17.09**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	8/26/2020	**7:30**	**ND**	**6.36**	**16.71**	**18.03**	**NA**	**1.33**	**Pre-pumping measurement**
	8/26/2020	**7:40**	**ND**	**8.73**	**ND**	**18.07**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/10/2020	**11:00**	**ND**	**7.42**	**15.85**	**17.11**	**NA**	**1.26**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:30**	**ND**	**7.48**	**ND**	**17.24**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/23/2020	**9:50**	**ND**	**7.59**	**15.95**	**17.11**	**NA**	**1.16**	**Pre-pumping measurement**
	9/24/2020	**7:30**	**ND**	**7.74**	**ND**	**17.30**	**NA**	**NA**	**Post-pumping measurement ~7.5 -gallons removed**
	10/7/2020	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	
	9/10/2020	9:15	ND	10.02	ND	12.91	NA	NA	
	9/23/2020	8:15	ND	10.38	ND	13.01	NA	NA	
	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
Sep-20	NA	NA	10	10	NA	20	9/11 and 9/24	Pending	Veolia ES
Oct-20	NA	NA	9	4	NA	13	10/14 and 10/21	Pending	Veolia ES
				TOTAL TO DATE:		**209.5**	gallons		

Notes: **DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number
		631 727-2700	

GENERATOR

5. Generator's Name and Mailing Address
Avalon Bay
94 Alexander St. Yonkers NY
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Eastern Environmental Solutions — U.S. EPA ID Number: NYR000135624

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Water NY
3249 Richmond Terrace, Staten Island NY 10303
Facility's Phone: — U.S. EPA ID Number:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Non DOT/RCRA Regulated Solid	001	DM	150	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
9.1) NON 0.1 Soaked PPE

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Esmy Janeiff AKRF — Signature — Month 10 Day 21 Year 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: S Kurmah Jr — Signature — Month 10 Day 21 Year 20
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Alexian Acevedo — Signature — Month 10 Day 27 Year 20

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1-800-99766966
Form SP-Portland-NWS-1 (Rev. 01/2015)
9121-7-2700

TRANSPORTER #1

Environmental, Planning, and Engineering Consultants
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Suite 401
White Plains, NY 10601
tel: 914 949-7336
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www.akrf.com

December 23, 2020

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – November 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of October 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of November 2020.
- On November 4, 5, 18, and 19, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of November 2020, no on-Site excavation activities below the final cover system occurred.
- On November 4 and 18, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On November 4 and 18, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the November 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 11/4/20 (feet)	DNAPL Thickness 11/18/20 (feet)
NW-3	3.17	2.83
NW-4	1.26	1.61

Note: Measured DNAPL thicknesses are estimated.

- On November 5 and 19, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~14 gallons total) and NW-4 (~7 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- On November 5, 2020, Eastern removed one drum of used PPE and oily debris generated during previous DNAPL recovery events. The drum was disposed of at Clean Waters of New York in Staten Island, New York. The non-hazardous waste manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2020.
- On November 18, 2020, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the October 2020 and November 5, 2020 DNAPL pumping events for off-site disposal at their facility in Flanders, New Jersey. The hazardous waste disposal manifest is included in Attachment A and will be included in the PRR for 2020.
- A total of 21 gallons of DNAPL was recovered during the reporting period, and 230.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). DNAPL recovery totals are summarized in Table 2.
- On November 25, 2020, AKRF collected composite waste classification samples WC-1_20201125, WC-2_20201125, and WC-3_20201125 from seven miscellaneous drums of soil and liquids from previous drilling events. The results of this sampling event will be included in the December 2020 monthly report.
- AKRF anticipates to complete DNAPL gauging and removal in December 2020 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for December 2020:

- Annual groundwater sampling in accordance with the SMP;
- Annual Site-Wide and Site Cover inspections for the PRR;
- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of twice per month; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick J. Methyl

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Veolia Manifest

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

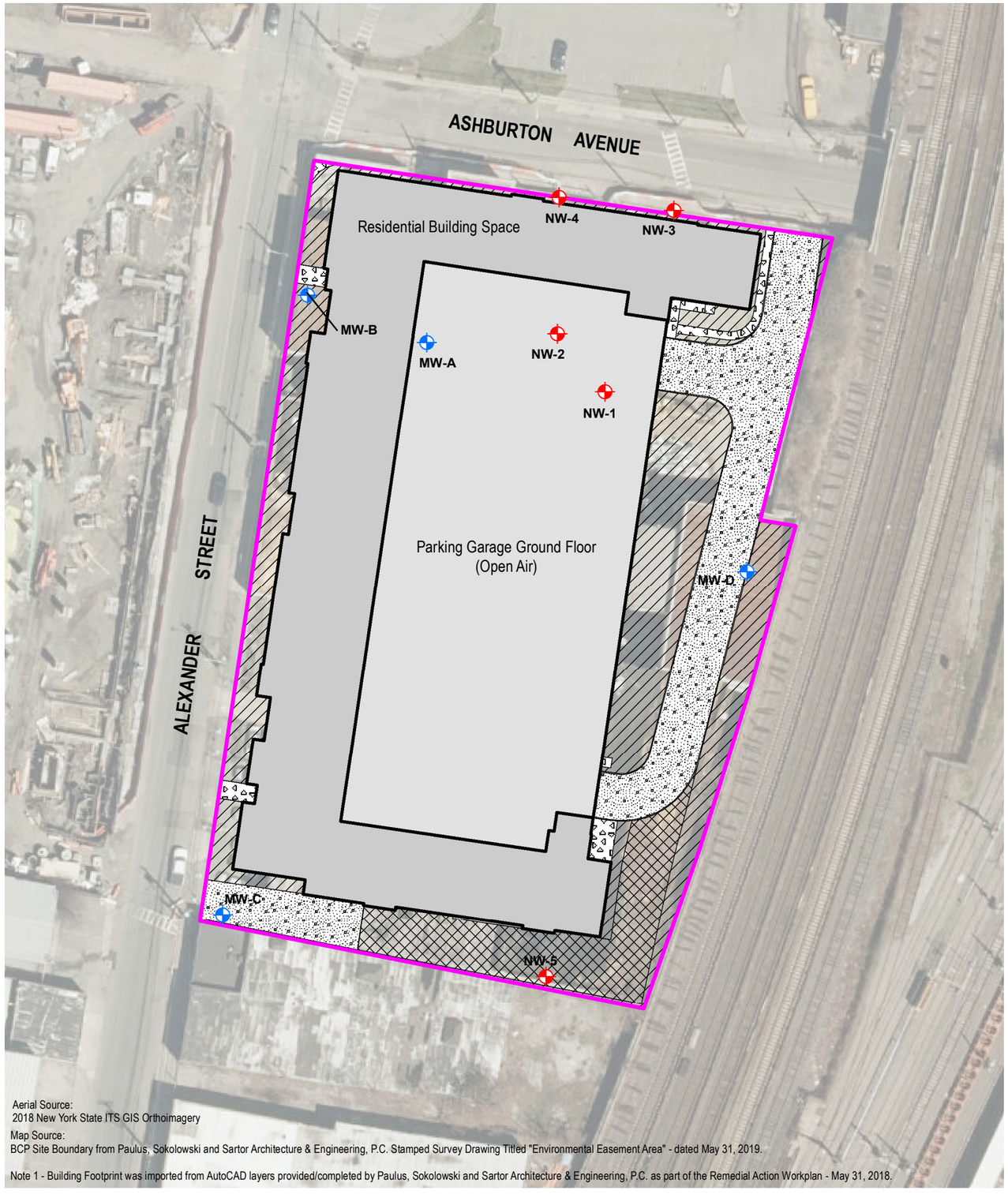
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
	9/10/2020	7:30	ND	9.64	ND	15.54	NA	NA	
	9/23/2020	7:15	ND	10.21	ND	15.58	NA	NA	
	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
MW-B	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
	9/10/2020	7:35	ND	8.80	ND	18.78	NA	NA	
	9/23/2020	7:20	ND	9.19	ND	18.83	NA	NA	
	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
MW-C	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
	9/10/2020	7:45	ND	6.44	ND	13.89	NA	NA	
	9/23/2020	7:25	ND	7.26	ND	13.90	NA	NA	
	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
MW-D	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
	9/10/2020	7:55	ND	7.75	ND	15.63	NA	NA	
	9/23/2020	7:35	ND	8.18	ND	15.69	NA	NA	
	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-1 (cont)	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
	9/10/2020	9:20	ND	9.18	ND	26.96	NA	NA	
	9/23/2020	8:30	ND	9.62	ND	26.99	NA	NA	
	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
	9/10/2020	9:25	ND	9.11	ND	24.53	NA	NA	
	9/23/2020	8:35	ND	9.36	ND	24.68	NA	NA	
	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement ~6 gallons removed**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)**
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	7/22/2020	10:45	ND	8.49	17.18	20.27	NA	3.09	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**
	7/27/2020	**7:40**	**ND**	**8.45**	**ND**	**20.27**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	8/6/2020	**10:30**	**ND**	**7.50**	**16.95**	**20.27***	**NA**	**3.32***	**Well in process of being converted to flush mount, change in height. * = ESTIMATED**
	8/12/2020	**10:46**	**ND**	**6.33**	**15.02**	**18.27**	**NA**	**3.25**	**Pre-pumping measurement**
	8/13/2020	**7:50**	**ND**	**6.36**	**ND**	**18.27**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	8/26/2020	**7:45**	**ND**	**6.41**	**16.85**	**18.91**	**NA**	**2.06**	**Pre-pumping measurement**
	8/26/2020	**7:50**	**ND**	**8.90**	**ND**	**18.87**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/10/2020	**10:45**	**ND**	**7.40**	**16.30**	**18.46**	**NA**	**2.16**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:45**	**ND**	**6.45**	**ND**	**18.55**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/23/2020	**9:30**	**ND**	**6.37**	**16.55**	**18.46**	**NA**	**1.91**	**Pre-pumping measurement**
	9/24/2020	**7:45**	**ND**	**6.45**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	10/7/2020	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.4**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	11/4/2020	**8:00**	**ND**	**6.30**	**15.55**	**18.72**	**NA**	**3.17**	**Pre-pumping measurement**
	11/5/2020	**8:15**	**ND**	**6.35**	**ND**	**18.74**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	**7:45**	**ND**	**7.41**	**16.12**	**18.95**	**NA**	**2.83**	**Pre-pumping measurement**
	11/19/2020	**8:00**	**ND**	**7.43**	**ND**	**18.97**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4	**1/9/2020**	**7:50**	**ND**	**10.09**	**15.89**	**18.16**	**NA**	**2.27**	**Pre-pumping measurement ~10 gallons removed**
	1/9/2020	**8:04**	**ND**	**10.14**	**ND**	**17.50**	**NA**	**NA**	**Post-pumping measurement**
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	**12:30**	**ND**	**10.09**	**15.14**	**18.10**	**NA**	**2.96**	**Pre-pumping measurement**
	2/21/2020	**9:00**	**ND**	**10.09**	**18.09**	**18.10**	**NA**	**0.01**	**Post-pumping measurement ~18.5 gallons removed**
	3/25/2020	**10:45**	**ND**	**10.34**	**16.40**	**19.00**	**NA**	**2.60**	**Pre-pumping measurement - Well coupling damaged**
	3/26/2020	**7:15**	**ND**	**10.34**	**ND**	**18.06**	**NA**	**NA**	**Post-pumping measurement ~7 gallons removed**
	4/21/2020	**10:33**	**ND**	**10.15**	**16.35**	**18.06**	**NA**	**1.71**	**Pre-pumping measurement**
	4/22/2020	**9:10**	**ND**	**10.38**	**ND**	**18.48**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	**12:10**	**ND**	**10.12**	**17.07**	**19.18**	**NA**	**2.11**	**Pre-pumping measurement**
	5/21/2020	**8:15**	**ND**	**8.52**	**ND**	**19.20**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)**
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	**9:40**	**ND**	**10.07**	**16.45**	**19.20**	**NA**	**2.75**	**Pre-pumping measurement**
	6/25/2020	**8:10**	**ND**	**10.07**	**ND**	**19.23**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	**10:05**	**ND**	**10.02**	**16.90**	**19.60**	**NA**	**2.70**	**Pre-pumping measurement**
	7/16/2020	**9:15**	**ND**	**10.02**	**ND**	**19.43**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	7/22/2020	**11:00**	**ND**	**10.02**	**18.65**	**19.41**	**NA**	**0.76**	
	7/26/2020	**12:11**	**ND**	**9.87**	**18.55**	**19.42**	**NA**	**0.87**	**Pre-pumping measurement**
	7/27/2020	**7:25**	**ND**	**9.88**	**ND**	**19.42**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	8/6/2020	10:50	ND	9.58	18.94	19.42*	NA	0.48*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	**10:40**	**ND**	**7.52**	**15.26**	**17.09**	**NA**	**1.83**	**Pre-pumping measurement**
	8/13/2020	**7:15**	**ND**	**7.35**	**ND**	**17.09**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	8/26/2020	**7:30**	**ND**	**6.36**	**16.71**	**18.03**	**NA**	**1.33**	**Pre-pumping measurement**
	8/26/2020	**7:40**	**ND**	**8.73**	**ND**	**18.07**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/10/2020	**11:00**	**ND**	**7.42**	**15.85**	**17.11**	**NA**	**1.26**	**Pre-pumping measurement (Well cut ~2-3' to grade within past two months)**
	9/11/2020	**7:30**	**ND**	**7.48**	**ND**	**17.24**	**NA**	**NA**	**Post-pumping measurement ~2.5 gallons removed**
	9/23/2020	**9:50**	**ND**	**7.59**	**15.95**	**17.11**	**NA**	**1.16**	**Pre-pumping measurement**
	9/24/2020	**7:30**	**ND**	**7.74**	**ND**	**17.30**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	10/7/2020	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	
	9/10/2020	9:15	ND	10.02	ND	12.91	NA	NA	
	9/23/2020	8:15	ND	10.38	ND	13.01	NA	NA	
	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.5	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
Sep-20	NA	NA	10	10	NA	20	9/11 and 9/24	11/18/2020	Veolia ES
Oct-20	NA	NA	9	4	NA	13	10/14 and 10/21	11/18/2020	Veolia ES
Nov-20	NA	NA	14	7	NA	21	11/5 and 11/19	*11/18/2020/ Pending	Veolia ES
				TOTAL TO DATE:		**230.5**	gallons		

Notes: *** On November 18, 2020, Veolia ES disposed of 6 gallons of DNAPL generated at NW-3 and NW-4 on November 5, 2020 in addition to the DNAPL generated in September and October 2020. The fifteen (15) gallons of DNAPL that were generated from NW-3 and NW-4 on November 19, 2020 are currently pending off-site disposal.**
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

ATTACHMENT A

Please print or type.
Form designed for use on elite (12-pitch) typewriter.

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address
99 ALEXANDER ST
YONKERS NY
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
EASTERN ENVIRONMENTAL SOLUTIONS
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
NEW WATER NY
3249 RICHMOND TERR
STATEN ISLAND NY
U.S. EPA ID Number
Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NOS-NRS oily PPE / solid waste	1	DM	40	LBS	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: K Sepkay Schmidt as agent for generator
Signature:
Month: 11 Day: 5 Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael KIDD
Signature:
Month: 11 Day: 5 Year: 20

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Alexis Acosta
Signature:
Month: 11 Day: 6 Year: 20

Printed in USA by GC Labels
1-800-967-5966

TRANSPORTER #1

Carbonless Parts - NON-HAZ MANIFEST (Copy 1)
GC 800-967-5966

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYR000247510	1	(877) 813-0087	001885687 VES

GENERATOR

5. Generator's Name and Mailing Address
~~ROBERT ACAMPORA~~ Avalon Sun Sites
POLYCHROME EAST (BUILDING 3)
80-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 [illegible]

Generator's Site Address (if different than mailing address)
SAME

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD066313669

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L L C
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 [illegible]
U.S. EPA ID Number: NJD980535993

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1993, WASTE FLAMMABLE LIQUID, n.o.s., (BENZENE, COAL TAR), 3, II	1	DM	250 MLS	P	D001	D018	
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: John Fitzpatrick
Signature: [signature]
Month: 11 Day: 18 Year: 20

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael L. Smith
Signature: [signature]
Month: 11 Day: 18 Year: 20

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
CONVERTED
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Eric Shinn
Signature: [signature]
Month: 11 Day: 18 Year: 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tel: 914 949-7336
fax: 914 949-7559
www.akrf.com

January 26, 2021

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – December 2020
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of December 2020.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of December 2020.
- On December 1, 2, 16, 18, 29, and 30, 2020, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of December 2020, no on-Site excavation activities below the final cover system occurred.
- On December 1, 16, and 29, 2020, DNAPL gauging was conducted at NW-3 and NW-4. On December 1, 16, and 29, 2020, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, and NW-4. NW-5 was not gauged due to construction materials staging obstructing access. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the December 2020 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 12/1/20 (feet)	DNAPL Thickness 12/16/20 (feet)	DNAPL Thickness 12/29/20 (feet)
NW-3	3.29	2.43	0.95
NW-4	0.65	0.57	1.05

Note: Measured DNAPL thicknesses are estimated.

- On December 2, 18, and 30, 2020, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~36 gallons total) and NW-4 (~13 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The increase in volume of DNAPL generated at NW-3 is attributed to excess water pumped by the vacuum truck on December 2, 2020 after the DNAPL interval was removed. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- On December 8 and 9, 2020, AKRF performed annual sampling from groundwater monitoring wells MW-A through MW-D in accordance with the SMP. The groundwater samples were collected from groundwater monitoring wells MW-A through MW-D 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, Target Analyte List (TAL) for metals (total and dissolved). The results of this sampling event along with sampling methodology will be submitted in the forthcoming Annual Groundwater Monitoring letter report in January 2021.
- On December 11, 2020, Tony Casale, Inc (the on-Site general contractor) re-installed the sub-slab depressurization system (SSDS) monitoring points MP-1 and MP-3 as the original points were encased in concrete and could not be found.
- On December 14, 2020, Eastern picked up seven miscellaneous drums of soil and liquids generated during previous drilling events (represented by composite waste classification samples WC-1_20201125, WC-2_20201125, and WC-3_20201125 collected on November 25, 2020) for off-site disposal at Clean Waters of New York in Staten Island, New York. The non-hazardous waste manifest is included in Attachment A and will be included in the upcoming Periodic Review Report (PRR) for 2020.
- On December 18, 2020, AKRF performed the Site-Wide and Site Cover inspections in accordance with the SMP. The Site-Wide Cover System was observed to be in good condition throughout all portions of the Site. Minor evidence of surficial cracks, none of which breached the Site-Wide Cover System, were observed and no corrective measures were necessary. Details of the Site-Wide Cover System inspection will be discussed in the PRR for 2020.
- On December 21, 2020, AKRF assisted in installation/troubleshooting of one of the SSDS blowers. Installation of the second blower is anticipated in either January or February of 2021, at which time the SSDS startup inspection will be completed.
- On December 21, 2020, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the November 2020 and December 2, 2020 DNAPL pumping events for off-site disposal at their facility in Flanders, New Jersey. The hazardous waste disposal manifest is included in Attachment A and will be included in the PRR for 2020.
- A total of 49 gallons of DNAPL was recovered during the reporting period, and 279.5 gallons of DNAPL have been recovered to date (including the December 2019 DNAPL recovery event). The increase in recovery for this reporting period is attributable to the removal of additional groundwater

during DNAPL pumping activities, specifically at NW-3. DNAPL recovery totals are summarized in Table 2.

- AKRF anticipates to complete DNAPL gauging and removal in January 2021 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for January 2021:

- SSDS start-up:
- Grading activities with NYSDEC-approved topsoil;
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of once every two weeks;
- Submission of the annual groundwater monitoring report; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Veolia Manifests

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Sarita Wagh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

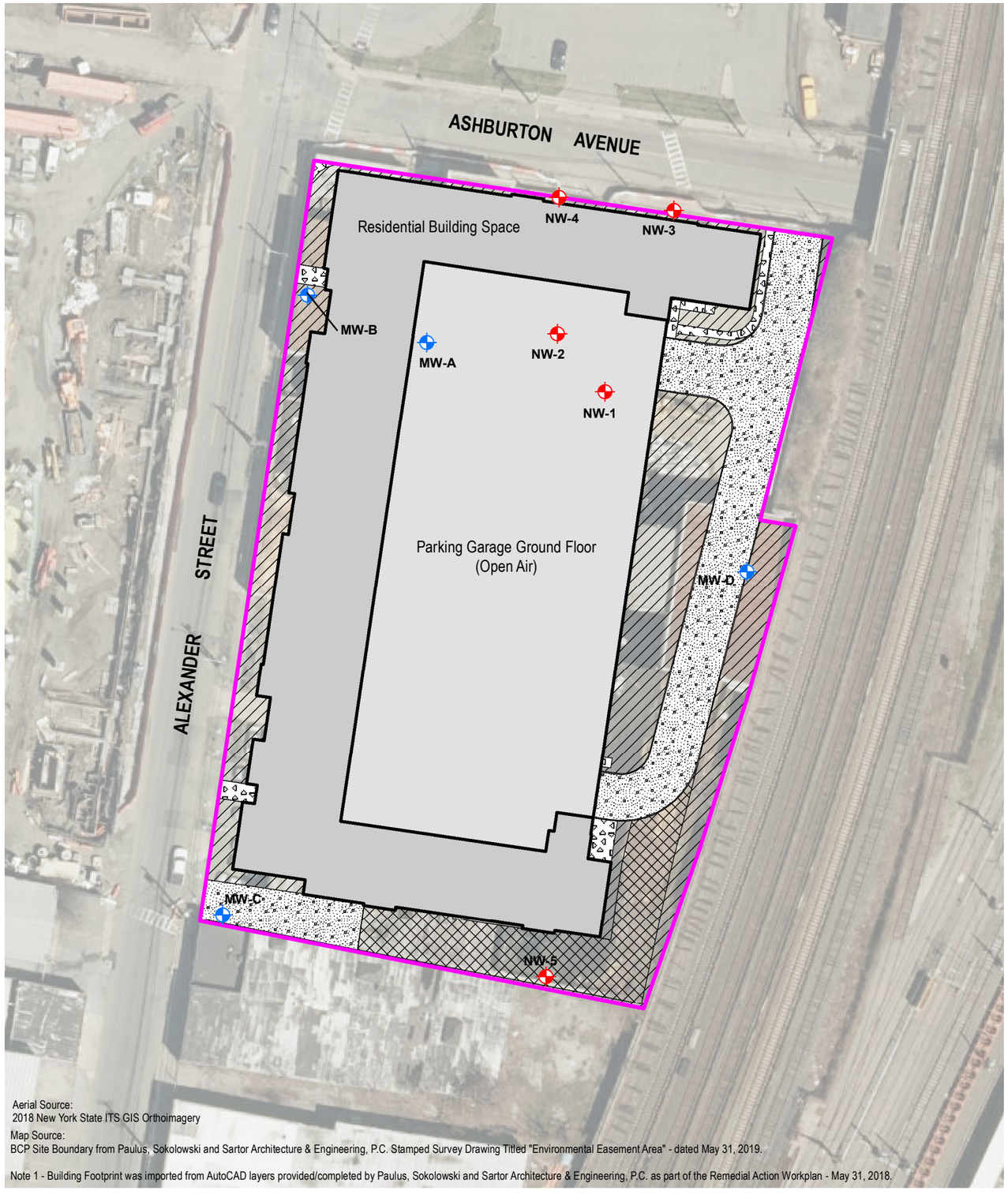
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
	1/9/2020	16:20	ND	10.04	ND	15.52	NA	NA	
	2/19/2020	9:00	ND	10.18	ND	15.57	NA	NA	
	3/25/2020	7:45	ND	9.72	ND	15.58	NA	NA	
	4/21/2020	7:40	ND	9.77	ND	15.57	NA	NA	
	5/19/2020	8:30	ND	10.04	ND	15.49	NA	NA	
	6/24/2020	7:20	ND	10.35	ND	15.50	NA	NA	
	7/15/2020	7:30	ND	9.59	ND	15.50	NA	NA	
	7/26/2020	8:35	ND	9.81	ND	15.52	NA	NA	
	8/12/2020	8:38	ND	9.66	ND	15.54	NA	NA	
MW-A	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to ductwork staged over well.
	9/10/2020	7:30	ND	9.64	ND	15.54	NA	NA	
	9/23/2020	7:15	ND	10.21	ND	15.58	NA	NA	
	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	9.43	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/9/2020	16:36	ND	8.94	ND	18.81	NA	NA	
	2/19/2020	11:00	ND	9.02	ND	18.81	NA	NA	
	3/25/2020	8:05	ND	9.25	ND	18.90	NA	NA	
	4/21/2020	7:50	ND	9.19	ND	18.85	NA	NA	
	5/19/2020	8:47	ND	9.29	ND	18.79	NA	NA	
	6/24/2020	7:25	ND	9.39	ND	18.73	NA	NA	
	7/15/2020	7:35	ND	8.89	ND	18.75	NA	NA	
	7/26/2020	8:40	ND	9.05	ND	18.78	NA	NA	
	8/12/2020	8:42	ND	8.83	ND	18.80	NA	NA	
MW-B	8/25/2020	11:25	ND	8.48	ND	19.11	NA	NA	
	9/10/2020	7:35	ND	8.80	ND	18.78	NA	NA	
	9/23/2020	7:20	ND	9.19	ND	18.83	NA	NA	
	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/9/2020	16:31	ND	6.53	ND	13.90	NA	NA	
	2/19/2020	9:00	ND	6.74	ND	13.88	NA	NA	
	3/25/2020	8:15	ND	7.24	ND	13.96	NA	NA	
	4/21/2020	7:58	ND	6.85	ND	14.03	NA	NA	
	5/19/2020	8:57	ND	7.12	ND	13.82	NA	NA	
	6/24/2020	7:27	ND	7.51	ND	13.87	NA	NA	
	7/15/2020	7:45	ND	6.81	ND	13.9	NA	NA	
	7/26/2020	8:50	ND	6.97	ND	13.83	NA	NA	
	8/12/2020	8:46	ND	6.79	ND	13.91	NA	NA	
MW-C	8/26/2020	10:10	ND	6.55	ND	13.93	NA	NA	
	9/10/2020	7:45	ND	6.44	ND	13.89	NA	NA	
	9/23/2020	7:25	ND	7.26	ND	13.90	NA	NA	
	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/9/2020	16:13	ND	7.30	ND	15.70	NA	NA	
	2/19/2020	9:00	ND	7.67	ND	15.71	NA	NA	
	3/25/2020	7:15	ND	8.01	ND	15.77	NA	NA	
	4/21/2020	8:05	ND	7.54	ND	15.61	NA	NA	
	5/19/2020	9:05	ND	7.58	ND	15.66	NA	NA	
	6/24/2020	7:30	ND	8.22	ND	15.59	NA	NA	
MW-D	7/15/2020	7:55	ND	7.66	ND	15.68	NA	NA	
	7/26/2020	9:01	ND	7.68	ND	15.67	NA	NA	
	8/12/2020	8:50	ND	7.81	ND	15.74	NA	NA	
	8/25/2020	11:35	ND	7.59	ND	15.68	NA	NA	
	9/10/2020	7:55	ND	7.75	ND	15.63	NA	NA	
	9/23/2020	7:35	ND	8.18	ND	15.69	NA	NA	
	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-D (Cont.)	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
NW-1	1/9/2020	16:15	ND	8.98	ND	27.09	NA	NA	
	2/19/2020	11:00	ND	9.27	ND	27.11	NA	NA	
	3/25/2020	9:10	ND	9.68	ND	27.20	NA	NA	
	4/21/2020	8:52	ND	9.40	ND	27.19	NA	NA	
	5/19/2020	10:10	ND	9.25	ND	26.96	NA	NA	
	6/24/2020	8:23	ND	9.69	ND	26.93	NA	NA	
	7/15/2020	8:35	ND	9.20	ND	26.95	NA	NA	
	7/26/2020	10:05	ND	9.30	ND	27.00	NA	NA	
	8/12/2020	9:38	ND	9.35	ND	26.95	NA	NA	
	8/25/2020	11:45	ND	9.05	ND	27.83	NA	NA	
	9/10/2020	9:20	ND	9.18	ND	26.96	NA	NA	
	9/23/2020	8:30	ND	9.62	ND	26.99	NA	NA	
	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
NW-2	1/9/2020	16:22	ND	8.99	ND	24.67	NA	NA	
	2/19/2020	11:00	ND	9.1	ND	24.80	NA	NA	
	3/25/2020	9:20	ND	9.40	ND	24.79	NA	NA	
	4/21/2020	8:55	ND	9.14	ND	24.78	NA	NA	
	5/19/2020	10:38	ND	9.27	ND	24.70	NA	NA	
	6/24/2020	8:28	ND	9.48	ND	24.74	NA	NA	
	7/15/2020	8:40	ND	9.23	ND	24.63	NA	NA	
	7/26/2020	10:15	ND	9.17	ND	24.65	NA	NA	
	8/12/2020	9:43	ND	9.20	ND	24.70	NA	NA	
	8/25/2020	NA	NA	NA	NA	NA	NA	NA	Inaccessible due to insulation staged over well.
	9/10/2020	9:25	ND	9.11	ND	24.53	NA	NA	
	9/23/2020	8:35	ND	9.36	ND	24.68	NA	NA	
	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
NW-3	**1/9/2020**	**8:10**	**ND**	**8.32**	**17.84**	**20.12**	**NA**	**2.28**	**Pre-pumping measurement ~6 gallons removed**
	1/9/2020	**8:17**	**ND**	**8.45**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement**
	1/10/2020	9:25	ND	8.39	ND	20.12	NA	NA	
	1/10/2020	14:40	ND	8.36	ND	20.09	NA	NA	
	2/19/2020	**12:30**	**ND**	**8.36**	**14.22**	**20.09**	**NA**	**5.87**	**Pre pumping measurement**
	2/21/2020	**8:40**	**ND**	**8.36**	**ND**	**20.09**	**NA**	**NA**	**Post-pumping measurement ~9.5 gallons removed**
	3/25/2020	**10:15**	**ND**	**8.46**	**13.53**	**20.13**	**NA**	**6.60**	**Pre-pumping measurement**
	3/26/2020	**7:40**	**ND**	**8.46**	**ND**	**20.25**	**NA**	**NA**	**Post-pumping measurement ~8 gallons removed**
	4/21/2020	**10:42**	**8.36**	**8.46**	**14.46**	**20.25**	**0.10**	**5.79**	**Pre-pumping measurement**
	4/22/2020	**9:30**	**ND**	**8.68**	**ND**	**20.08**	**NA**	**NA**	**Post-pumping measurement ~7.5 gallons removed**
	4/30/2020	11:45	ND	NA	17.30	20.08	NA	2.95	
	5/7/2020	8:45	9.10	9.30	15.45	20.08	0.20	4.63	
	5/14/2020	13:00	ND	8.28	14.18	20.08	NA	5.90	
	5/19/2020	**12:25**	**ND**	**8.47**	**15.06**	**20.10**	**NA**	**5.04**	**Pre-pumping measurement**
	5/21/2020	**7:30**	**ND**	**10.38**	**ND**	**20.12**	**NA**	**NA**	**Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)**
	6/12/2020	11:00	ND	8.43	15.19	20.12	NA	4.93	Trace LNAPL film
	6/24/2020	**9:50**	**ND**	**8.50**	**14.15**	**20.10**	**NA**	**5.95**	**Trace LNAPL film. Pre-pumping measurement**
	6/25/2020	**8:20**	**ND**	**8.50**	**ND**	**20.10**	**NA**	**NA**	**Post-pumping measurement ~10 gallons removed**
	6/29/2020	11:00	ND	8.62	16.02	20.33	NA	4.31	
	7/8/2020	9:30	ND	8.59	14.70	20.33	NA	5.63	
	7/15/2020	**10:30**	**ND**	**8.43**	**14.40**	**20.33**	**NA**	**5.93**	**Pre-pumping measurement**
	7/16/2020	**9:40**	**ND**	**8.43**	**ND**	**20.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	7/22/2020	10:45	ND	8.49	17.18	20.27	NA	3.09	
	7/26/2020	**11:50**	**ND**	**8.43**	**17.05**	**20.27**	**NA**	**3.22**	**Pre-pumping measurement**

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3 (Cont.)	7/27/2020	7:40	ND	8.45	ND	20.27	NA	NA	Post-pumping measurement ~8 gallons removed
	8/6/2020	10:30	ND	7.50	16.95	20.27*	NA	3.32*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	10:46	ND	6.33	15.02	18.27	NA	3.25	Pre-pumping measurement
	8/13/2020	7:50	ND	6.36	ND	18.27	NA	NA	Post-pumping measurement ~4 gallons removed
	8/26/2020	7:45	ND	6.41	16.85	18.91	NA	2.06	Pre-pumping measurement
	8/26/2020	7:50	ND	8.90	ND	18.87	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/10/2020	10:45	ND	7.40	16.30	18.46	NA	2.16	Pre-pumping measurement (Well cut ~2-3' to grade within past two months)
	9/11/2020	7:45	ND	6.45	ND	18.55	NA	NA	Post-pumping measurement ~2.5 -gallons removed
	9/23/2020	9:30	ND	6.37	16.55	18.46	NA	1.91	Pre-pumping measurement
	9/24/2020	7:45	ND	6.45	ND	18.64	NA	NA	Post-pumping measurement ~7.5 -gallons removed
	10/7/2020	11:45	ND	6.30	16.01	18.58	NA	2.57	Pre-pumping measurement
	10/14/2020	8:00	ND	6.20	ND	18.4	NA	NA	Post-pumping measurement ~4 -gallons removed
	10/21/2020	10:10	ND	6.26	15.04	18.63	NA	3.59	Pre-pumping measurement
	10/21/2020	12:45	ND	6.26	ND	18.63	NA	NA	Post-pumping measurement ~5 -gallons removed
	11/4/2020	8:00	ND	6.30	15.55	18.72	NA	3.17	Pre-pumping measurement
	11/5/2020	8:15	ND	6.35	ND	18.74	NA	NA	Post-pumping measurement ~4 -gallons removed
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	7:45	ND	7.41	16.12	18.95	NA	2.83	Pre-pumping measurement
	11/19/2020	8:00	ND	7.43	ND	18.97	NA	NA	Post-pumping measurement ~10 -gallons removed
	12/1/2020	10:30	ND	6.11	15.40	18.69	NA	3.29	Pre-pumping measurement
	12/2/2020	8:35	ND	6.09	ND	18.72	NA	NA	Post-pumping measurement ~30 -gallons removed
	12/16/2020	10:30	ND	6.21	16.25	18.68	NA	2.43	Pre-pumping measurement
	12/18/2020	9:45	ND	6.40	ND	18.62	NA	NA	Post-pumping measurement ~3 -gallons removed
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	8:15	ND	6.19	17.70	18.65	NA	0.95	Pre-pumping measurement
	12/30/2020	8:45	ND	6.17	ND	18.65	NA	NA	Post-pumping measurement ~3 -gallons removed
NW-4	1/9/2020	7:50	ND	10.09	15.89	18.16	NA	2.27	Pre-pumping measurement ~10 gallons removed
	1/9/2020	8:04	ND	10.14	ND	17.50	NA	NA	Post-pumping measurement
	1/10/2020	9:40	ND	10.07	ND	18.10	NA	NA	
	1/10/2020	14:45	ND	10.07	ND	18.10	NA	NA	
	2/19/2020	12:30	ND	10.09	15.14	18.10	NA	2.96	Pre-pumping measurement
	2/21/2020	9:00	ND	10.09	18.09	18.10	NA	0.01	Post-pumping measurement ~18.5 gallons removed
	3/25/2020	10:45	ND	10.34	16.40	19.00	NA	2.60	Pre-pumping measurement - Well coupling damaged
	3/26/2020	7:15	ND	10.34	ND	18.06	NA	NA	Post-pumping measurement ~7 gallons removed
	4/21/2020	10:33	ND	10.15	16.35	18.06	NA	1.71	Pre-pumping measurement
	4/22/2020	9:10	ND	10.38	ND	18.48	NA	NA	Post-pumping measurement ~7.5 gallons removed
	4/30/2020	11:45	ND	NA	16.40	NA	NA	1.66	
	5/7/2020	8:45	ND	10.10	ND	19.23	NA	NA	
	5/14/2020	13:00	ND	10.11	17.49	19.23	NA	1.74	
	5/19/2020	12:10	ND	10.12	17.07	19.18	NA	2.11	Pre-pumping measurement
	5/21/2020	8:15	ND	8.52	ND	19.20	NA	NA	Post-pumping measurement ~20 gallons removed (likely includes some groundwater due to viscous nature of coal tar during NAPL recovery)
	6/12/2020	11:30	ND	10.09	17.80	19.20	NA	1.40	
	6/24/2020	9:40	ND	10.07	16.45	19.20	NA	2.75	Pre-pumping measurement
	6/25/2020	8:10	ND	10.07	ND	19.23	NA	NA	Post-pumping measurement ~10 gallons removed
	6/29/2020	11:30	ND	10.22	18.46	19.60	NA	1.14	
	7/8/2020	10:00	ND	10.14	17.52	19.60	NA	2.08	
	7/15/2020	10:05	ND	10.02	16.90	19.60	NA	2.70	Pre-pumping measurement
	7/16/2020	9:15	ND	10.02	ND	19.43	NA	NA	Post-pumping measurement ~5 gallons removed
	7/22/2020	11:00	ND	10.02	18.65	19.41	NA	0.76	
	7/26/2020	12:11	ND	9.87	18.55	19.42	NA	0.87	Pre-pumping measurement
	7/27/2020	7:25	ND	9.88	ND	19.42	NA	NA	Post-pumping measurement ~3 gallons removed
	8/6/2020	10:50	ND	9.58	18.94	19.42*	NA	0.48*	Well in process of being converted to flush mount, change in height. * = ESTIMATED
	8/12/2020	10:40	ND	7.52	15.26	17.09	NA	1.83	Pre-pumping measurement
	8/13/2020	7:15	ND	7.35	ND	17.09	NA	NA	Post-pumping measurement ~4 gallons removed
	8/26/2020	7:30	ND	6.36	16.71	18.03	NA	1.33	Pre-pumping measurement
	8/26/2020	7:40	ND	8.73	ND	18.07	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/10/2020	11:00	ND	7.42	15.85	17.11	NA	1.26	Pre-pumping measurement (Well cut ~2-3' to grade within past two months)
	9/11/2020	7:30	ND	7.48	ND	17.24	NA	NA	Post-pumping measurement ~2.5 gallons removed
	9/23/2020	9:50	ND	7.59	15.95	17.11	NA	1.16	Pre-pumping measurement
	9/24/2020	7:30	ND	7.74	ND	17.30	NA	NA	Post-pumping measurement ~7.5 -gallons removed
	10/7/2020	11:35	ND	7.41	16.21	17.23	NA	1.02	Pre-pumping measurement
	10/14/2020	7:50	ND	7.33	ND	17.33	NA	NA	Post-pumping measurement ~4 gallons removed

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-4 (Cont.)	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/1/2020	**10:40**	**ND**	**7.17**	**16.65**	**17.30**	**NA**	**0.65**	**Pre-pumping measurement**
	12/2/2020	**8:05**	**ND**	**7.14**	**ND**	**17.32**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/16/2020	**10:50**	**ND**	**7.35**	**16.75**	**17.32**	**NA**	**0.57**	**Pre-pumping measurement**
	12/18/2020	**9:30**	**ND**	**7.40**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	**7:15**	**ND**	**7.28**	**16.29**	**17.35**	**NA**	**1.06**	**Pre-pumping measurement**
	12/30/2020	**7:45**	**ND**	**7.25**	**ND**	**17.36**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
NW-5	1/9/2020	16:30	ND	9.47	ND	15.99	NA	NA	
	2/19/2020	11:00	ND	9.66	ND	15.99	NA	NA	
	3/25/2020	9:05	ND	10.11	ND	13.02	NA	NA	
	4/21/2020	8:45	ND	9.60	ND	13.00	NA	NA	
	5/19/2020	10:50	ND	9.85	ND	13.04	NA	NA	
	6/24/2020	8:32	ND	10.40	ND	13.03	NA	NA	
	7/15/2020	8:55	ND	9.69	ND	12.91	NA	NA	
	7/26/2020	10:30	ND	9.88	ND	12.98	NA	NA	
	8/12/2020	9:51	ND	10.06	ND	13.02	NA	NA	
	8/25/2020	11:50	ND	9.89	ND	13.05	NA	NA	
	9/10/2020	9:15	ND	10.02	ND	12.91	NA	NA	
	9/23/2020	8:15	ND	10.38	ND	13.01	NA	NA	
	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.5	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Monthly Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
Jan-20	NA	NA	6	10	NA	16	1/9/2020	2/21/2020	Veolia ES
Feb-20	NA	NA	9.5	18.5	NA	28	2/19 and 2/21/20	2/21/2020	Veolia ES
Mar-20	NA	NA	8	7	NA	15	3/26/2020	5/20/2020	Veolia ES
Apr-20	NA	NA	7.5	7.5	NA	15	4/22/2020	5/20/2020	Veolia ES
May-20	NA	NA	20	20	NA	40	5/21/2020	7/29/2020	Veolia ES
Jun-20	NA	NA	10	10	NA	20	6/25/2020	7/29/2020	Veolia ES
Jul-20	NA	NA	13	8	NA	21	7/16 and 7/17/20	8/26/2020	Veolia ES
Aug-20	NA	NA	6.5	6.5	NA	13	8/13 and 8/25	8/26/2020	Veolia ES
Sep-20	NA	NA	10	10	NA	20	9/11 and 9/24	11/18/2020	Veolia ES
Oct-20	NA	NA	9	4	NA	13	10/14 and 10/21	11/18/2020	Veolia ES
Nov-20	NA	NA	14	7	NA	21	11/5 and 11/19	12/21/2020	Veolia ES
Dec-20	NA	NA	36	13	NA	49	12/2, 12/18, 12/30	*12/21/2020/ Pending	Veolia ES
				TOTAL TO DATE:		**279.5**	gallons		

Notes: *** On December 21, 2020, Veolia ES disposed of 50 gallons of DNAPL generated at NW-3 and NW-4, including 15-gallons of DNAPL generated on November 19, 2020 and 35 gallons of DNAPL generated on December 2, 2020. The 14 gallons of DNAPL that were generated at NW-3 and NW-4 on December 18 and 20, 2020 are**
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

ATTACHMENT A

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

JD 32362

AKRF
30-94 Alexander

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	8777772766	

GENERATOR

5. Generator's Name and Mailing Address
AVALON SUN SITES LLC

Generator's Site Address (if different than mailing address)
139-145 ALEXANDER ST
PEMBROKE NH 03201

Generator's Phone:

6. Transporter 1 Company Name
Eastern Environmental Solutions, Inc.

U.S. EPA ID Number
NYR000135624

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clearwater of New York
3249 Richmond Terrace
Staten Island, NY

U.S. EPA ID Number

Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	CONTAMINATED DRILL CUTTINGS Non Hazardous Non RCRA Solids	4	DM	0500	P	
2.	CONTAMINATED WATER Non Hazardous Non RCRA Liquids	3	DM	150	G	
3.						
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: JOHN FOSTER — Signature — Month: 12 Day: 14 Year: 20

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Mike Mackie — Signature — Month: 12 Day: 14 Year: 20

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Alexian Alvedo — Signature — Month: 12 Day: 29 Year: 20

Printed in USA by GC Labels
1-800-997-6966

TRANSPORTER #1

Reorder Part# MANIFEST-C6NHW
913-897-6966

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYR000247510	1	(877) 318-0087	001802171 VES

GENERATOR

5. Generator's Name and Mailing Address
AVALON SUN SITES LLC ~~ROBERT ACAMPORA~~
POLYCHROME EAST (BUILDING 3)
80-94 ALEXANDER STREET
YONKERS, NY 10701
Generator's Phone: 203 415-7300

Generator's Site Address (if different than mailing address)
SAME

6. Transporter 1 Company Name
VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
VEOLIA ES TECHNICAL SOLUTIONS L.L.C.
1 EDEN LANE
FLANDERS, NJ 07836
Facility's Phone: 973 347-7111
U.S. EPA ID Number: NJD980536503

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1992, WASTE FLAMMABLE LIQUIDS, TOXIC, n.o.s., (XYLENE, TRICHLOROPROPANE), 3 (6.1), II, RQ (D001)	1	DM	300	P	F002 F005 D018 F003 D001 D021
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
ER Service Contracted by VESTS -|- Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X JON LARIVIERE
Signature: X
Month Day Year: 12 16 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Transporter signature (for exports only):
Port of entry/exit:
Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael J Smith
Signature: Michael J Smith
Month Day Year: 12 21 20

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator)
Manifest Reference Number:
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Eric Stern
Signature: Eric Stern
Month Day Year: 12 21 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tell: 914 949-7336
fax: 914 949-7559
www.akrf.com

February 26, 2021

Mr. Matthew Lubick
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – January 2021
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Lubick:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of January 2021.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of January 2021.
- On January 13, 14, 27, and 28, 2021, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of January 2021, no on-Site excavation activities below the final cover system occurred.
- On January 13 and 27, 2021, DNAPL gauging was conducted at NW-3 and NW-4. On January 13 and 27, 2021, AKRF completed the monthly gauging of the following groundwater monitoring and DNAPL recovery wells: MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5 (no gauging was conducted on NW-5 on January 13, 2021, due to staged construction materials obstructing access). DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the January 2021 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 1/13/21 (feet)	DNAPL Thickness 1/27/21 (feet)
NW-3	3.44	2.33
NW-4	1.01	1.20

Note: Measured DNAPL thicknesses are estimated.

- On January 14 and 28, 2021, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~9 gallons total) and NW-4 (~9 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of 18 gallons of DNAPL was recovered during the reporting period. Since DNAPL removal activities began in December 2019, a total of 297.5 gallons of DNAPL have been removed. DNAPL recovery totals are summarized in Table 2.
- On January 25, 2021, AKRF performed an inspection of the on-Site sub-slab depressurization system (SSDS) prior to the initial start-up and assisted with the installation and troubleshooting of the second SSDS blower. Induced sub-slab vacuum readings at the SSDS monitoring points were all within acceptable ranges. Installation of the remaining SSDS instrumentation components (i.e. flow meters and vacuum gauges) will be completed following successful pressure testing of the above ground SSDS piping, at which time the SSDS startup inspection will be completed.
- AKRF anticipates to conduct DNAPL gauging and removal in February 2021 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for February 2021:

- SSDS start-up:
- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of once every two weeks; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Saria Waugh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Capo Rizzo/Marc Geoduck/Steve Grens/Rebecca Kina – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

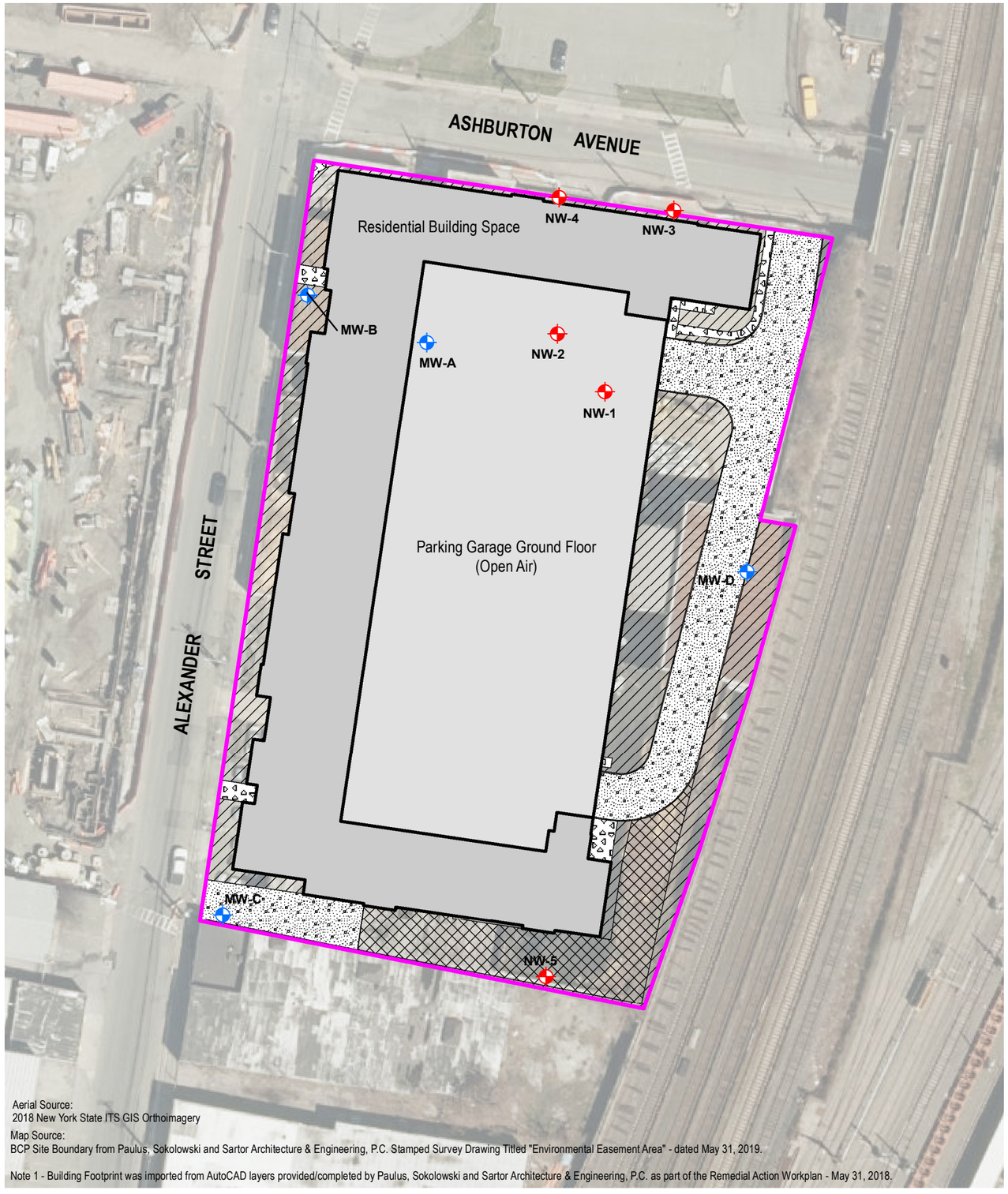
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	9.43	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/13/2021	8:15	ND	9.72	ND	15.56	NA	NA	
	1/27/2021	7:15	ND	9.93	ND	15.12	NA	NA	
MW-B	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/13/2021	8:00	ND	6.14	ND	16.31	NA	NA	
	1/27/2021	7:20	ND	6.38	ND	16.34	NA	NA	
MW-C	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/13/2021	8:05	ND	6.49	ND	13.71	NA	NA	
	1/27/2021	7:25	ND	6.70	ND	13.93	NA	NA	
MW-D	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
	1/13/2021	8:10	ND	7.40	ND	15.70	NA	NA	
	1/27/2021	7:30	ND	7.44	ND	15.62	NA	NA	
NW-1	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA	
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA	
NW-2	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
	1/13/2021	8:20	ND	9.93	ND	24.72	NA	NA	
	1/27/2021	8:45	ND	8.99	ND	24.66	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3	**10/7/2020**	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.4**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	11/4/2020	**8:00**	**ND**	**6.30**	**15.55**	**18.72**	**NA**	**3.17**	**Pre-pumping measurement**
	11/5/2020	**8:15**	**ND**	**6.35**	**ND**	**18.74**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	**7:45**	**ND**	**7.41**	**16.12**	**18.95**	**NA**	**2.83**	**Pre-pumping measurement**
	11/19/2020	**8:00**	**ND**	**7.43**	**ND**	**18.97**	**NA**	**NA**	**Post-pumping measurement ~10 -gallons removed**
	12/1/2020	**10:30**	**ND**	**6.11**	**15.40**	**18.69**	**NA**	**3.29**	**Pre-pumping measurement**
	12/2/2020	**8:35**	**ND**	**6.09**	**ND**	**18.72**	**NA**	**NA**	**Post-pumping measurement ~30 -gallons removed**
	12/16/2020	**10:30**	**ND**	**6.21**	**16.25**	**18.68**	**NA**	**2.43**	**Pre-pumping measurement**
	12/18/2020	**9:45**	**ND**	**6.40**	**ND**	**18.62**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	**8:15**	**ND**	**6.19**	**17.70**	**18.65**	**NA**	**0.95**	**Pre-pumping measurement**
	12/30/2020	**8:45**	**ND**	**6.17**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44	
	1/14/2021	**7:40**	**ND**	**6.18**	**15.05**	**18.65**	**NA**	**3.60**	**Pre-pumping measurement**
	1/14/2021	**7:50**	**ND**	**6.54**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33	
	1/28/2021	**7:50**	**ND**	**6.60**	**16.40**	**18.73**	**NA**	**2.33**	**Pre-pumping measurement**
	1/28/2021	**7:55**	**ND**	**6.70**	**ND**	**18.73**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
NW-4	**10/7/2020**	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/1/2020	**10:40**	**ND**	**7.17**	**16.65**	**17.30**	**NA**	**0.65**	**Pre-pumping measurement**
	12/2/2020	**8:05**	**ND**	**7.14**	**ND**	**17.32**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/16/2020	**10:50**	**ND**	**7.35**	**16.75**	**17.32**	**NA**	**0.57**	**Pre-pumping measurement**
	12/18/2020	**9:30**	**ND**	**7.40**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	**7:15**	**ND**	**7.28**	**16.29**	**17.35**	**NA**	**1.06**	**Pre-pumping measurement**
	12/30/2020	**7:45**	**ND**	**7.25**	**ND**	**17.36**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/13/2021	9:50	ND	7.38	16.34	17.35	NA	1.01	
	1/14/2021	**7:15**	**ND**	**7.42**	**16.35**	**17.35**	**NA**	**1.00**	**Pre-pumping measurement**
	1/14/2021	**7:35**	**ND**	**7.91**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/27/2021	10:40	ND	7.55	16.25	17.45	NA	1.20	
	1/28/2021	**7:30**	**ND**	**7.60**	**16.25**	**17.45**	**NA**	**1.20**	**Pre-pumping measurement**
	1/28/2021	**7:45**	**ND**	**7.78**	**ND**	**17.45**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
NW-5	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/13/2021	10:00	ND	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/27/2021	8:35	ND	7.48	ND	10.70	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
2020 Total	NA	NA	149.5	121.5	NA	271	1/9/2020 – 12/30/2020	2/21/2020 - 12/2/2020; Pending*	Veolia ES
Jan-21	NA	NA	9	9	NA	18	1/14, 1/28	Pending	Veolia ES
				TOTAL TO DATE:		**297.5**	gallons		

Notes: *** On December 21, 2020, Veolia ES disposed of 50 gallons of DNAPL generated at NW-3 and NW-4 on November 19 and December 2, 2020. The 14 gallons of DNAPL that were generated at NW-3 and NW-4 on December 18 and 30, 2020 and the 18 gallons of DNAPL that were generated on January 14 and 28, 2021 are DNAPL - Dense Non-Aqueous Phase Liquid**
NA - Not Applicable

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tell: 914 949-7336
fax: 914 949-7559
www.akrf.com

March 15, 2021

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – February 2021
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Lubick:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of February 2021.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of February 2021.
- On February 8, 11, 24, and 25, 2021, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of February 2021, no on-Site excavation activities below the final cover system occurred.
- On February 8 and 24, 2021, DNAPL gauging was conducted at NW-3 and NW-4, and monthly gauging was conducted at MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the February 2021 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 2/8/21 (feet)	DNAPL Thickness 2/24/21 (feet)
NW-3	1.69	1.84
NW-4	0.60	0.71

Note: Measured DNAPL thicknesses are estimated.

- On February 11 and 25, 2021, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~6 gallons total) and NW-4 (~4 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- On February 11, 2021, Veolia Environmental Services (VES) picked up one drum of DNAPL generated during the December 2020 and January 2021 DNAPL pumping events for off-site disposal at their facility in Flanders, New Jersey. The hazardous waste disposal manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2021.
- A total of approximately 10 gallons of DNAPL was recovered during the reporting period. Since DNAPL removal activities began in December 2019, a total of 307.5 gallons of DNAPL have been removed. DNAPL recovery totals are summarized in Table 2.
- On February 22 and 24, 2021, AKRF performed additional annual sampling from groundwater monitoring wells MW-A through MW-D in accordance with the SMP. The groundwater samples were collected from groundwater monitoring wells MW-A through MW-D and analyzed for 1,4-dioxane by EPA Method 8270D-SIM. The results of this sampling event along with sampling methodology will be submitted in a revision to the previously submitted Annual Groundwater Monitoring letter report in March 2021, which will be included as part of the PRR.
- On February 26, 2021, AKRF performed oversight during successful pressure testing activities on the sub-slab depressurization system (SSDS) risers R-1 through R-7 and vertical risers VR-1, VR-1A, and VR-1B. AKRF subsequently performed the SSDS start-up inspection. SSDS blowers were confirmed to be operational. Measured flow rates and applied vacuum readings on VR-1A and VR-1B, and induced vacuum readings on MP-1 through MP-4 were within the acceptable ranges specified in the SMP. During the SSDS start-up, it was noted that only one differential pressure switch had been installed (at VR-1A). Installation of the additional differential pressure switch is expected to take place in March 2021. Details of this installation will be included in the March 2021 monthly report.
- AKRF anticipates to conduct DNAPL gauging and removal in March 2021 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for March 2021:

- General site work above the Site-Wide Cover System;
- Installation of differential pressure switch in SSDS riser VR-1B;
- NAPL recovery well monitoring and NAPL recovery at a frequency of once every two weeks; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Veolia Manifests

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Saria Waugh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Capo Rizzo/Marc Geoduck/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

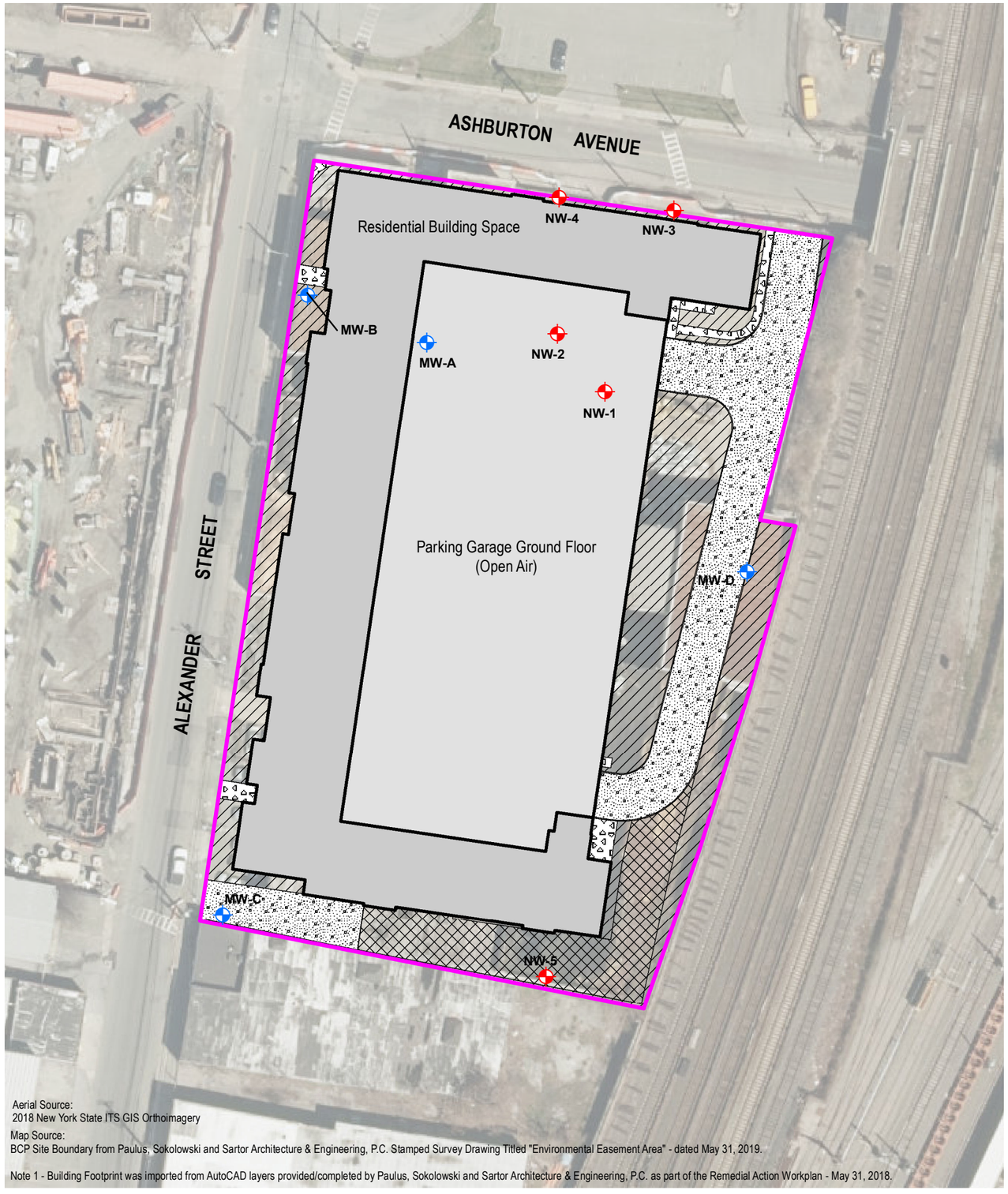
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	9.43	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/13/2021	8:15	ND	9.72	ND	15.56	NA	NA	
	1/27/2021	7:15	ND	9.93	ND	15.12	NA	NA	
	2/8/2021	7:30	ND	9.60	ND	15.50	NA	NA	
	2/24/2021	12:50	ND	9.47	ND	15.50	NA	NA	
MW-B	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/13/2021	8:00	ND	6.14	ND	16.31	NA	NA	
	1/27/2021	7:20	ND	6.38	ND	16.34	NA	NA	
	2/8/2021	7:50	ND	6.32	ND	17.31	NA	NA	
	2/24/2021	7:15	ND	6.16	ND	16.29	NA	NA	
MW-C	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/13/2021	8:05	ND	6.49	ND	13.71	NA	NA	
	1/27/2021	7:25	ND	6.70	ND	13.93	NA	NA	
	2/8/2021	8:00	ND	6.69	ND	13.86	NA	NA	
	2/24/2021	7:20	ND	6.58	ND	13.92	NA	NA	
MW-D	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
	1/13/2021	8:10	ND	7.40	ND	15.70	NA	NA	
	1/27/2021	7:30	ND	7.44	ND	15.62	NA	NA	
	2/8/2021	8:15	ND	7.72	ND	15.63	NA	NA	
	2/24/2021	7:30	NA	7.59	ND	15.59	NA	NA	
NW-1	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA	
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA	
	2/8/2021	9:35	ND	9.08	ND	27.02	NA	NA	
	2/24/2021	8:40	ND	8.98	ND	26.97	NA	NA	
NW-2	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
	1/13/2021	8:20	ND	9.93	ND	24.72	NA	NA	
	1/27/2021	8:45	ND	8.99	ND	24.66	NA	NA	
	2/8/2021	9:40	ND	9.24	ND	24.71	NA	NA	
	2/24/2021	8:50	ND	9.06	ND	24.56	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3	**10/7/2020**	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.40**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	11/4/2020	**8:00**	**ND**	**6.30**	**15.55**	**18.72**	**NA**	**3.17**	**Pre-pumping measurement**
	11/5/2020	**8:15**	**ND**	**6.35**	**ND**	**18.74**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	**7:45**	**ND**	**7.41**	**16.12**	**18.95**	**NA**	**2.83**	**Pre-pumping measurement**
	11/19/2020	**8:00**	**ND**	**7.43**	**ND**	**18.97**	**NA**	**NA**	**Post-pumping measurement ~10 -gallons removed**
	12/1/2020	**10:30**	**ND**	**6.11**	**15.40**	**18.69**	**NA**	**3.29**	**Pre-pumping measurement**
	12/2/2020	**8:35**	**ND**	**6.09**	**ND**	**18.72**	**NA**	**NA**	**Post-pumping measurement ~30 -gallons removed**
	12/16/2020	**10:30**	**ND**	**6.21**	**16.25**	**18.68**	**NA**	**2.43**	**Pre-pumping measurement**
	12/18/2020	**9:45**	**ND**	**6.40**	**ND**	**18.62**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	**8:15**	**ND**	**6.19**	**17.70**	**18.65**	**NA**	**0.95**	**Pre-pumping measurement**
	12/30/2020	**8:45**	**ND**	**6.17**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44	
	1/14/2021	**7:40**	**ND**	**6.18**	**15.05**	**18.65**	**NA**	**3.60**	**Pre-pumping measurement**
	1/14/2021	**7:50**	**ND**	**6.54**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33	
	1/28/2021	**7:50**	**ND**	**6.60**	**16.40**	**18.73**	**NA**	**2.33**	**Pre-pumping measurement**
	1/28/2021	**7:55**	**ND**	**6.70**	**ND**	**18.73**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	2/8/2021	10:30	ND	6.35	16.91	18.60	NA	1.69	
	2/11/2021	**9:45**	**ND**	**6.36**	**16.95**	**18.60**	**NA**	**1.65**	**Pre-pumping measurement**
	2/11/2021	**10:00**	**ND**	**6.40**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	2/24/2021	10:00	ND	6.30	16.75	18.59	NA	1.84	
	2/25/2021	**7:40**	**ND**	**6.32**	**16.75**	**18.59**	**NA**	**1.84**	**Pre-pumping measurement**
	2/25/2021	**7:45**	**ND**	**6.33**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
NW-4	**10/7/2020**	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/1/2020	**10:40**	**ND**	**7.17**	**16.65**	**17.30**	**NA**	**0.65**	**Pre-pumping measurement**
	12/2/2020	**8:05**	**ND**	**7.14**	**ND**	**17.32**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/16/2020	**10:50**	**ND**	**7.35**	**16.75**	**17.32**	**NA**	**0.57**	**Pre-pumping measurement**
	12/18/2020	**9:30**	**ND**	**7.40**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	**7:15**	**ND**	**7.28**	**16.29**	**17.35**	**NA**	**1.06**	**Pre-pumping measurement**
	12/30/2020	**7:45**	**ND**	**7.25**	**ND**	**17.36**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/13/2021	9:50	ND	7.38	16.34	17.35	NA	1.01	
	1/14/2021	**7:15**	**ND**	**7.42**	**16.35**	**17.35**	**NA**	**1.00**	**Pre-pumping measurement**
	1/14/2021	**7:35**	**ND**	**7.91**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/27/2021	10:40	ND	7.55	16.25	17.45	NA	1.20	
	1/28/2021	**7:30**	**ND**	**7.60**	**16.25**	**17.45**	**NA**	**1.20**	**Pre-pumping measurement**
	1/28/2021	**7:45**	**ND**	**7.78**	**ND**	**17.45**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	2/8/2021	10:50	ND	7.48	16.80	17.40	NA	0.60	
	2/11/2021	**9:30**	**ND**	**7.50**	**16.80**	**17.38**	**NA**	**0.58**	**Pre-pumping measurement**
	2/11/2021	**9:40**	**ND**	**7.60**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	2/24/2021	10:10	ND	7.46	16.68	17.39	NA	0.71	
	2/25/2021	**7:50**	**ND**	**7.46**	**16.65**	**17.39**	**NA**	**0.74**	**Pre-pumping measurement**
	2/25/2021	**7:55**	**ND**	**7.47**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
NW-5	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/13/2021	10:00	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/27/2021	8:35	ND	7.48	ND	10.70	NA	NA	
	2/8/2021	9:50	ND	7.72	ND	10.57	NA	NA	
	2/24/2021	8:30	ND	7.50	ND	10.56	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
2020 Total	NA	NA	149.5	121.5	NA	271	1/9/2020 – 12/30/2020	2/21/2020 – 2/11/2021	Veolia ES
Jan-21	NA	NA	9	9	NA	18	1/14, 1/28	2/11/2021	Veolia ES
Feb-21	NA	NA	6	4	NA	10	2/11, 2/25	Pending	Veolia ES
				TOTAL TO DATE:		**307.5**	gallons		

Notes: *** On February 11, 2021, Veolia ES disposed of 14 gallons of DNAPL generated at NW-3 and NW-4 on December 18 and 30, 2020 and 18 gallons of DNAPL generated at NW-3 and NW-4 on January 14 and 28, 2021. The 10 gallons of DNAPL that were generated at NW-3 and NW-4 on February 11 and 25, 2021 are currently pending off-site disposal.**
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

ATTACHMENT A

MAIL

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYR000247510
2. Page 1 of: 1
3. Emergency Response Phone: (877) 818-0087
4. Manifest Tracking Number: 001885744 VES

5. Generator's Name and Mailing Address: ~~JON LAVIERE (C) STEVEN GRIMM~~ AVALON ~~SITE SERVICES~~ LLC ~~94 SOUTH BROADWAY SUITE 301 POLYCHROME EAST WHITE PLAINS, NY 10601~~ 80-94 ALEXANDER ST. YONKERS NY 10701
Generator's Site Address (if different than mailing address): 80-94 ALEXANDER STREET POLYCHROME EAST YONKERS, NY 10701
Generator's Phone: ~~203-~~

6. Transporter 1 Company Name: VEOLIA ES TECHNICAL SOLUTIONS
U.S. EPA ID Number: NJD080631369

7. Transporter 2 Company Name:
U.S. EPAID Number:

8. Designated Facility Name and Site Address: VEOLIA ES TECHNICAL SOLUTIONS L.L.C. 1 EDEN LANE FLANDERS, NJ 07836
Facility's Phone: 973-347-7111
U.S. EPA ID Number: NJD980536593

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1992, WASTE FLAMMABLE LIQUIDS, TOXIC, n.o.s., (XYLENE, TRICHLOROPROPANE), 3 (6.1), II, RQ (D001)	1	DM	400	P	F002	F005	D018
						F003	D001	D021
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: ER Service Contracted by VEOLIA + Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf.

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X JON LAVIERE
Signature: X
Month: 02 Day: 11 Year: 21

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael L. Smith
Signature: Michael L Smith
Month: 02 Day: 11 Year: 21

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

18. Discrepancy

18a. Discrepancy Indication Space: ☐ Quantity ☒ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Section 13 - The only Waste Codes That Apply are: D001, D018 & NY Handling Code: B
(M. Moskell, Veolia, NJ, 2/22/21)

18b. Alternate Facility (or Generator):
Manifest Reference Number:
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. M141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Eric Stiner
Signature:
Month: 2 Day: 11 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tell: 914 949-7336
fax: 914 949-7559
www.akrf.com

April 9, 2021

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – March 2021
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of March 2021.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of March 2021.
- On March 10, 11, 24, and 25, 2021, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of March 2021, no on-Site excavation activities below the final cover system occurred.
- On March 10 and 24, 2021, DNAPL gauging was conducted at NW-3 and NW-4, and monthly gauging was conducted at MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the March 2021 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 3/10/21 (feet)	DNAPL Thickness 3/24/21 (feet)
NW-3	2.28	1.05
NW-4	0.36	0.20

Note: Measured DNAPL thicknesses are estimated.

- On March 11 and 25, 2021, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~7 gallons total) and NW-4 (~4 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of approximately 11 gallons of DNAPL was recovered during the reporting period. Since DNAPL removal activities began in December 2019, a total of 318.5 gallons of DNAPL have been removed. DNAPL recovery totals are summarized in Table 2.
- On March 19, 2021, Brookside Environmental of Copiague, New York (Brookside) picked up one drum of groundwater, which was generated during the December 2020 annual sampling event. The drum was disposed of at Clean Waters of New York in Staten Island, New York. The non-hazardous waste manifest is included in Attachment A and will be included in the Periodic Review Report (PRR) for 2021.
- On March 25, 2021, AKRF performed the first quarterly inspection of the sub-slab depressurization system (SSDS). SSDS blowers were confirmed to be operational. Measured flow rates and applied vacuum readings on VR-1A and VR-1B, and induced vacuum readings on MP-1 through MP-4 were within the acceptable ranges specified in the SMP. It was confirmed that the installation of the additional differential pressure switch on VR-1B occurred prior to AKRF's SSDS inspection on March 25, 2021 and both differential pressure switches were operational.
- AKRF anticipates to conduct DNAPL gauging and removal in April 2021 using the same methods as described above while long-term trends and alternate recovery methods are evaluated.

The following work is planned for April 2021:

- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of once every two weeks; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals
Attachment A – Brookside Manifest

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Saria Waugh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Capo Rizzo/Marc Geoduck/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

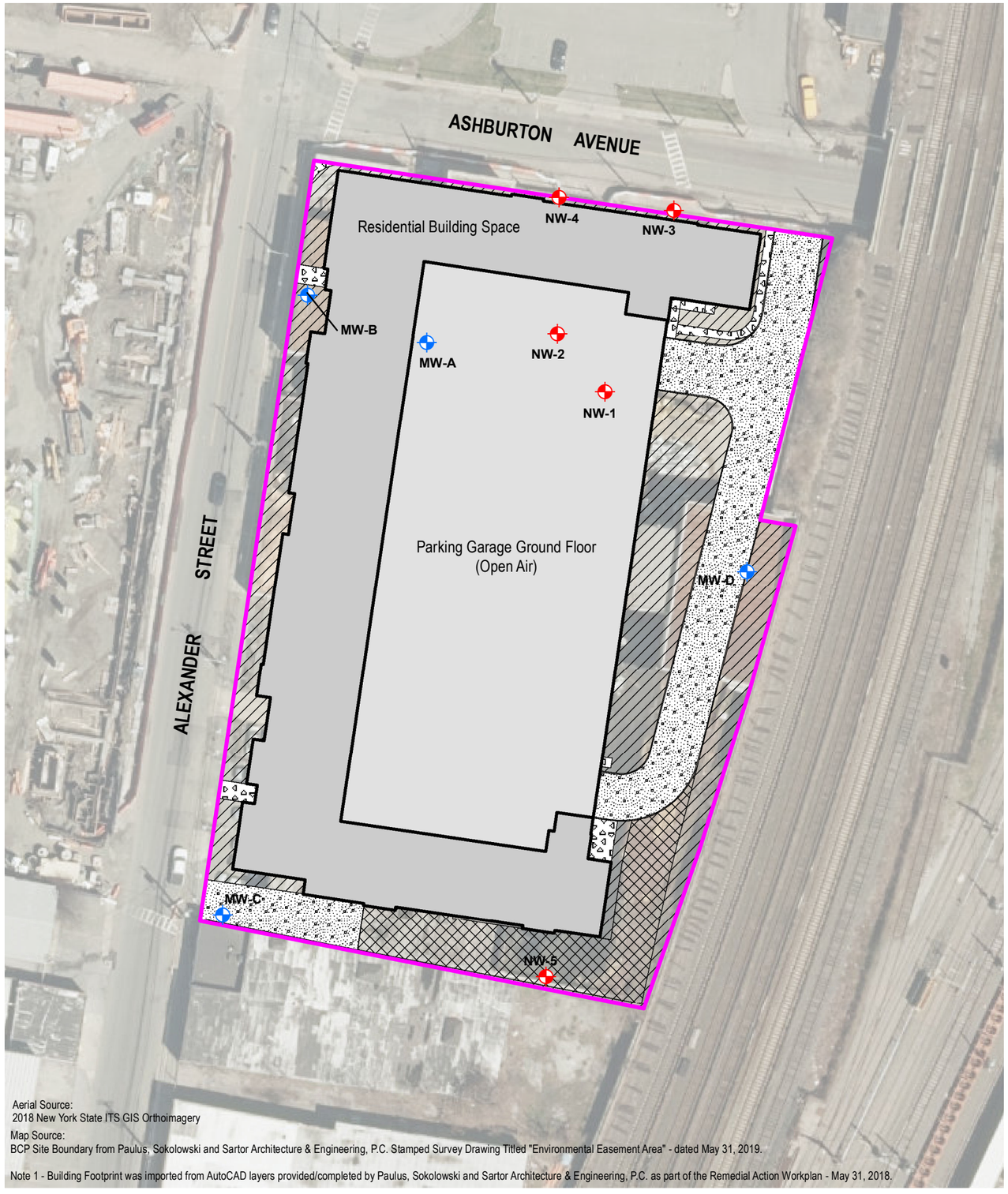
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	9.43	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/13/2021	8:15	ND	9.72	ND	15.56	NA	NA	
	1/27/2021	7:15	ND	9.93	ND	15.12	NA	NA	
	2/8/2021	7:30	ND	9.60	ND	15.50	NA	NA	
	2/24/2021	12:50	ND	9.47	ND	15.50	NA	NA	
	3/10/2021	9:00	ND	9.85	ND	15.56	NA	NA	
	3/24/2021	8:36	ND	9.92	ND	15.56	NA	NA	
MW-B	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/13/2021	8:00	ND	6.14	ND	16.31	NA	NA	
	1/27/2021	7:20	ND	6.38	ND	16.34	NA	NA	
	2/8/2021	7:50	ND	6.32	ND	17.31	NA	NA	
	2/24/2021	7:15	ND	6.16	ND	16.29	NA	NA	
	3/10/2021	9:10	ND	6.24	ND	16.29	NA	NA	
	3/24/2021	8:32	ND	6.36	ND	16.19	NA	NA	
MW-C	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/13/2021	8:05	ND	6.49	ND	13.71	NA	NA	
	1/27/2021	7:25	ND	6.70	ND	13.93	NA	NA	
	2/8/2021	8:00	ND	6.69	ND	13.86	NA	NA	
	2/24/2021	7:20	ND	6.58	ND	13.92	NA	NA	
	3/10/2021	9:15	ND	6.26	ND	13.88	NA	NA	
	3/24/2021	8:41	ND	6.78	ND	13.82	NA	NA	
MW-D	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
	1/13/2021	8:10	ND	7.40	ND	15.70	NA	NA	
	1/27/2021	7:30	ND	7.44	ND	15.62	NA	NA	
	2/8/2021	8:15	ND	7.72	ND	15.63	NA	NA	
	2/24/2021	7:30	ND	7.59	ND	15.59	NA	NA	
	3/10/2021	9:25	ND	7.23	ND	15.54	NA	NA	
	3/24/2021	8:29	ND	7.51	ND	15.53	NA	NA	
NW-1	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA	
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA	
	2/8/2021	9:35	ND	9.08	ND	27.02	NA	NA	
	2/24/2021	8:40	ND	8.98	ND	26.97	NA	NA	
	3/10/2021	9:50	ND	8.76	ND	27.04	NA	NA	
	3/24/2021	8:53	ND	8.92	ND	27.04	NA	NA	
NW-2	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
	1/13/2021	8:20	ND	9.93	ND	24.72	NA	NA	
	1/27/2021	8:45	ND	8.99	ND	24.66	NA	NA	
	2/8/2021	9:40	ND	9.24	ND	24.71	NA	NA	
	2/24/2021	8:50	ND	9.06	ND	24.56	NA	NA	
	3/10/2021	9:55	ND	8.98	ND	24.68	NA	NA	
	3/24/2021	8:50	ND	8.99	ND	24.62	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3	**10/7/2020**	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.40**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	11/4/2020	**8:00**	**ND**	**6.30**	**15.55**	**18.72**	**NA**	**3.17**	**Pre-pumping measurement**
	11/5/2020	**8:15**	**ND**	**6.35**	**ND**	**18.74**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	**7:45**	**ND**	**7.41**	**16.12**	**18.95**	**NA**	**2.83**	**Pre-pumping measurement**
	11/19/2020	**8:00**	**ND**	**7.43**	**ND**	**18.97**	**NA**	**NA**	**Post-pumping measurement ~10 -gallons removed**
	12/1/2020	**10:30**	**ND**	**6.11**	**15.40**	**18.69**	**NA**	**3.29**	**Pre-pumping measurement**
	12/2/2020	**8:35**	**ND**	**6.09**	**ND**	**18.72**	**NA**	**NA**	**Post-pumping measurement ~30 -gallons removed**
	12/16/2020	**10:30**	**ND**	**6.21**	**16.25**	**18.68**	**NA**	**2.43**	**Pre-pumping measurement**
	12/18/2020	**9:45**	**ND**	**6.40**	**ND**	**18.62**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	**8:15**	**ND**	**6.19**	**17.70**	**18.65**	**NA**	**0.95**	**Pre-pumping measurement**
	12/30/2020	**8:45**	**ND**	**6.17**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44	
	1/14/2021	**7:40**	**ND**	**6.18**	**15.05**	**18.65**	**NA**	**3.60**	**Pre-pumping measurement**
	1/14/2021	**7:50**	**ND**	**6.54**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33	
	1/28/2021	**7:50**	**ND**	**6.60**	**16.40**	**18.73**	**NA**	**2.33**	**Pre-pumping measurement**
	1/28/2021	**7:55**	**ND**	**6.70**	**ND**	**18.73**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	2/8/2021	10:30	ND	6.35	16.91	18.60	NA	1.69	
	2/11/2021	**9:45**	**ND**	**6.36**	**16.95**	**18.60**	**NA**	**1.65**	**Pre-pumping measurement**
	2/11/2021	**10:00**	**ND**	**6.40**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	2/24/2021	10:00	ND	6.30	16.75	18.59	NA	1.84	
	2/25/2021	**7:40**	**ND**	**6.32**	**16.75**	**18.59**	**NA**	**1.84**	**Pre-pumping measurement**
	2/25/2021	**7:45**	**ND**	**6.33**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	3/10/2021	11:10	ND	6.26	16.42	18.70	NA	2.28	
	3/11/2021	**7:55**	**ND**	**6.25**	**16.22**	**18.70**	**NA**	**2.28**	**Pre-pumping measurement**
	3/11/2021	**8:10**	**ND**	**6.26**	**ND**	**18.71**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	3/24/2021	9:43	ND	6.28	17.55	18.60	NA	1.05	
	3/25/2021	**8:20**	**ND**	**6.19**	**17.45**	**18.61**	**NA**	**1.16**	**Pre-pumping measurement**
	3/25/2021	**8:30**	**ND**	**6.18**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
NW-4	**10/7/2020**	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/1/2020	**10:40**	**ND**	**7.17**	**16.65**	**17.30**	**NA**	**0.65**	**Pre-pumping measurement**
	12/2/2020	**8:05**	**ND**	**7.14**	**ND**	**17.32**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/16/2020	**10:50**	**ND**	**7.35**	**16.75**	**17.32**	**NA**	**0.57**	**Pre-pumping measurement**
	12/18/2020	**9:30**	**ND**	**7.40**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	**7:15**	**ND**	**7.28**	**16.29**	**17.35**	**NA**	**1.06**	**Pre-pumping measurement**
	12/30/2020	**7:45**	**ND**	**7.25**	**ND**	**17.36**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/13/2021	9:50	ND	7.38	16.34	17.35	NA	1.01	
	1/14/2021	**7:15**	**ND**	**7.42**	**16.35**	**17.35**	**NA**	**1.00**	**Pre-pumping measurement**
	1/14/2021	**7:35**	**ND**	**7.91**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/27/2021	10:40	ND	7.55	16.25	17.45	NA	1.20	
	1/28/2021	**7:30**	**ND**	**7.60**	**16.25**	**17.45**	**NA**	**1.20**	**Pre-pumping measurement**
	1/28/2021	**7:45**	**ND**	**7.78**	**ND**	**17.45**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	2/8/2021	10:50	ND	7.48	16.80	17.40	NA	0.60	
	2/11/2021	**9:30**	**ND**	**7.50**	**16.80**	**17.38**	**NA**	**0.58**	**Pre-pumping measurement**
	2/11/2021	**9:40**	**ND**	**7.60**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	2/24/2021	10:10	ND	7.46	16.68	17.39	NA	0.71	
	2/25/2021	**7:50**	**ND**	**7.46**	**16.65**	**17.39**	**NA**	**0.74**	**Pre-pumping measurement**
	2/25/2021	**7:55**	**ND**	**7.47**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	3/10/2021	11:20	ND	7.45	17.04	17.40	NA	0.36	
	3/11/2021	**7:30**	**ND**	**7.49**	**16.66**	**17.40**	**NA**	**0.74**	**Pre-pumping measurement**
	3/11/2021	**7:36**	**ND**	**7.55**	**ND**	**17.39**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	3/24/2021	9:36	ND	7.48	17.21	17.41	NA	0.20	
	3/25/2021	**7:55**	**ND**	**7.39**	**17.18**	**17.38**	**NA**	**0.20**	**Pre-pumping measurement**
	3/25/2021	**8:10**	**ND**	**7.08**	**ND**	**17.39**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
NW-5	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/13/2021	10:00	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/27/2021	8:35	ND	7.48	ND	10.70	NA	NA	
	2/8/2021	9:50	ND	7.72	ND	10.57	NA	NA	
	2/24/2021	8:30	ND	7.50	ND	10.56	NA	NA	
	3/10/2021	9:40	ND	7.19	ND	10.55	NA	NA	
	3/24/2021	8:45	ND	7.45	ND	10.46	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
2020 Total	NA	NA	149.5	121.5	NA	271	1/9/2020 – 12/30/2020	2/21/2020 – 2/11/2021	Veolia ES
Jan-21	NA	NA	9	9	NA	18	1/14, 1/28	2/11/2021	Veolia ES
Feb-21	NA	NA	6	4	NA	10	2/11, 2/25	Pending	Veolia ES
Mar-21	NA	NA	7	4	NA	11	3/11, 3/25	Pending	Veolia ES
				TOTAL TO DATE:		**318.5**	gallons		

Notes: *** On February 11, 2021, Veolia ES disposed of 14 gallons of DNAPL generated at NW-3 and NW-4 on December 18 and 30, 2020 and 18 gallons of DNAPL generated at NW-3 and NW-4 on January 14 and 28, 2021. The 10 gallons of DNAPL that were generated at NW-3 and NW-4 on February 11 and 25, 2021 and the 11 gallons of DNAPL that were generated at NW-3 and NW-4 on March 11 and 25, 2021 are currently pending off-site disposal.**

DNAPL - Dense Non-Aqueous Phase Liquid

NA - Not Applicable

ATTACHMENT A

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: Not Required

2. Page 1 of: 1

3. Emergency Response Phone: 631-608-8610

4. Waste Tracking Number: 2481-31921-E

5. Generator's Name and Mailing Address
[illegible] LLC
1499 Post Road
Fairfield CT 06824
Generator's Phone: 201 684-3857

Generator's Site Address (if different than mailing address)
80-84 Alexander Street
Yonkers NY 10701

6. Transporter 1 Company Name: Brookside Environmental, Inc.
U.S. EPA ID Number: NYR000081661

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Water of New York
3249 Richmond Terrace
Staten Island NY 10303
Facility's Phone: 718 981-4360
U.S. EPA ID Number: NYD000688545

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non-regulated material, liquid	01	DM	55	G	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
PURGED GROUNDWATER. APPROVAL # 237-238

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: X Jon Larrinua
Signature: X
Month Day Year: 3 19 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: William Ryan
Signature:
Month Day Year: 3 19 21

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Carlos Herrera
Signature:
Month Day Year: 3 30 21

Environmental, Planning, and Engineering Consultants
34 South Broadway
Suite 401
White Plains, NY 10601
tell: 914 949-7336
fax: 914 949-7559
www.akrf.com

May 16, 2021

Mr. Matthew Hubicki
Project Manager
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7016

Re: Progress Report – April 2021
Polychrome East Site
City of Yonkers, Westchester County
NYSDEC BCP Site No. C360098

Dear Mr. Hubicki:

This Progress Report has been prepared by AKRF, Inc. (AKRF) on behalf of Avalon Yonkers Sun Sites, LLC (AVB) to summarize the work performed at the Polychrome East site [Brownfield Cleanup Program (BCP) Site No. C360098] located at 80-94 Alexander Street, Yonkers, New York (the Site) during the month of April 2021.

Community Air Monitoring Plan (CAMP) observations were as follows:

- No intrusive soil work occurred below the final cover system at the Site during the reporting period for the month of April 2021.
- On April 7, 8, 21, and 22, 2021, handheld equipment was used to monitor volatile organic compounds (VOCs), oxygen, and hydrogen sulfide (H2S) during dense non-aqueous phase liquid (DNAPL) coal tar removal activities in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP). Air monitoring was performed within the work zone. No VOC or H2S exceedances were recorded during the DNAPL removal activities.

Site Activities:

- During the month of April 2021, no on-Site excavation activities below the final cover system occurred.

  On April 7 and 21, 2021, DNAPL gauging was conducted at NW-3 and NW-4, and monthly gauging was conducted at MW-A, MW-B, MW-C, MW-D, NW-1, NW-2, NW-3, NW-4, and NW-5. DNAPL recovery wells are equipped with 3-foot sumps. DNAPL was detected during the March 2021 monitoring events in NW-3 and NW-4 as summarized below and detailed in the attached Table 1.

Recovery Well ID	DNAPL Thickness 4/7/21 (feet)	DNAPL Thickness 4/21/21 (feet)
NW-3	0.95	0.85
NW-4	0.10	0.11

Note: Measured DNAPL thicknesses are estimated.

- On April 8 and 22, 2021, AKRF performed oversight during DNAPL removal, which was completed by Eastern Environmental of Manorville, New York (Eastern). Measurable DNAPL was removed from recovery wells NW-3 (~15.5 gallons total) and NW-4 (~4.5 gallons total) utilizing a vacuum truck to apply vacuum on an internal 1-inch pipe within the respective recovery well. The recovered DNAPL was containerized in a Department of Transportation (DOT)-approved 55-gallon drum, labeled as hazardous waste, and staged on-Site in Grid Cell E2 (see Figure 2) for off-site disposal at an appropriate receiving facility. Following DNAPL removal, the vacuum truck was decontaminated using a steam pressure washer with the decontamination fluids drummed on-Site.
- A total of approximately 20 gallons of DNAPL was recovered during the reporting period; however, it is anticipated that some of the volume is also groundwater due to the relatively low levels of DNAPL thicknesses reported. Since DNAPL removal activities began in December 2019, a total of 338.5 gallons of DNAPL have been removed. DNAPL recovery totals are summarized in Table 2.
- AKRF anticipates conducting DNAPL gauging and removal in May 2021 using the same methods as described above while long-term trends are evaluated.

The following work is planned for May 2021:

- General site work above the Site-Wide Cover System;
- NAPL recovery well monitoring and NAPL recovery at a frequency of once every two weeks; and
- Disposal, as needed, of recovered DNAPL (i.e., coal tar) and used personal protective equipment and field supplies.

If you have any questions or require additional information, please contact me at (914) 922-2387.

Sincerely,
AKRF, Inc.

Patrick McHugh, P.E.
Environmental Engineer

Encl.: Figure 1 – Site Location Map
Figure 2 – Site Plan with Reference Grid
Figure 3 – NAPL Recovery & Groundwater Monitoring Well Location Plan
Table 1 – Polychrome East Well Gauging Measurements
Table 2 – Polychrome East DNAPL Recovery Totals

cc (electronic copy only): Kevin Carpenter/Scott Deyette – NYSDEC
Saria Waugh – NYSDOH
Glen Moran/Christopher Reynolds/Jon Vogel/Michael Simpson – AVB
Scott Caporizzo/Marc Godick/Steve Grens/Rebecca Kinal – AKRF

ATTACHMENTS

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCET\Technical\GIS and Graphics\HazmatFER\180132 Fig 1 site loc map.mxd 12/19/2019 3:07:42 PM mveilleux

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

SITE LOCATION MAP

DATE
12/19/2019

PROJECT NO.
180132

FIGURE
1

LEGEND

PROJECT SITE BOUNDARY

A
1
ALPHANUMERIC GRID

0 40 80 160

SCALE IN FEET

Aerial Source:
2014 New York Statewide Digital Orthoimagery.

AKRF
440 Park Avenue South, New York, NY 10016

C360098 - Polychrome East
80-94 Alexander Street, Yonkers, New York

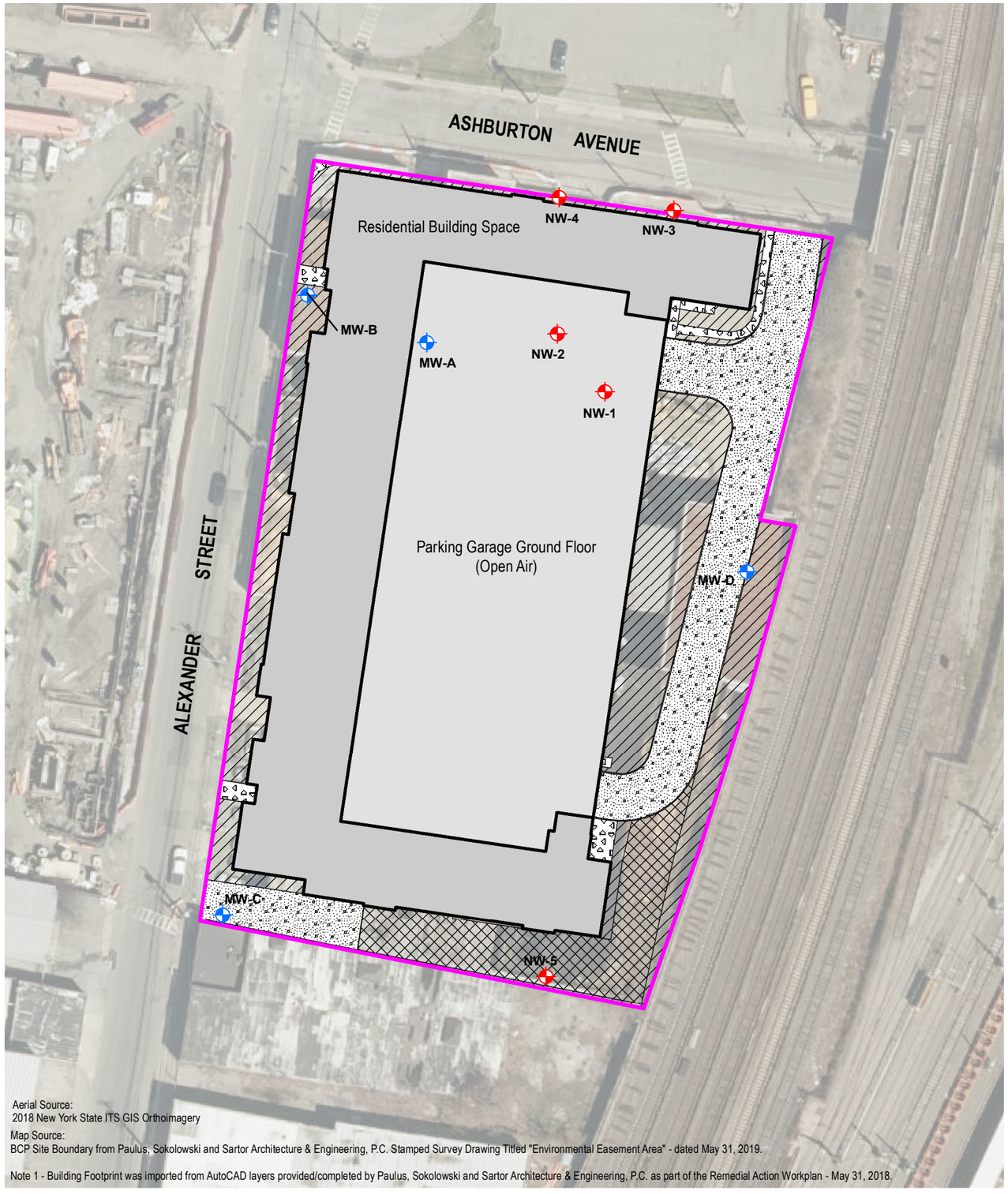
SITE PLAN WITH REFERENCE GRID

DATE
7/18/2018

PROJECT NO.
180132

FIGURE
2

©2018 AKRF, Inc Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\Hazmat\Polychrome East\CAD\180132 Fig 2 WC Grid (Polychrome East).dwg last save: mvelleux 7/18/2018 9:36 AM



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 was imported from AutoCAD layers provided/completed by Paulus, Sokolowski and Sartor Architecture & Engineering, P.C. as part of the Remedial Action Workplan - May 31, 2018.

LEGEND

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

0 30 60 120

SCALE IN FEET

AKRF
34 S. Broadway #401, White Plains, NY 10601

Polychrome East
NYSDEC Site (BCP #C360098)
Yonkers, New York

NAPL RECOVERY AND GROUNDWATER MONITORING WELLS

DATE
12/20/2019

PROJECT NO.
180132

FIGURE
3

©2019 AKRF Q:\Projects\180132 - AVALONBAY YONKERS - BLD 3 - PCE\Technical\GIS and Graphics\Hazmat\FER\180132 Fig 7 NAPL Recovery and GW Wells.mxd 12/20/2019 8:37:10 AM mvelleux

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
MW-A	10/7/2020	10:10	ND	9.92	ND	15.50	NA	NA	
	10/21/2020	7:35	ND	9.54	ND	15.45	NA	NA	
	11/4/2020	5:25	ND	9.53	ND	15.60	NA	NA	
	11/18/2020	8:10	ND	9.63	ND	16.12	NA	NA	
	12/1/2020	8:55	ND	9.43	ND	15.51	NA	NA	
	12/16/2020	7:30	ND	8.55	ND	15.48	NA	NA	
	12/29/2020	7:30	ND	9.58	ND	15.52	NA	NA	
	1/13/2021	8:15	ND	9.72	ND	15.56	NA	NA	
	1/27/2021	7:15	ND	9.93	ND	15.12	NA	NA	
	2/8/2021	7:30	ND	9.60	ND	15.50	NA	NA	
	2/24/2021	12:50	ND	9.47	ND	15.50	NA	NA	
	3/10/2021	9:00	ND	9.85	ND	15.56	NA	NA	
	3/24/2021	8:36	ND	9.92	ND	15.56	NA	NA	
	4/7/2021	7:45	ND	9.77	ND	15.50	NA	NA	
	4/21/2021	8:30	ND	9.65	ND	15.51	NA	NA	
MW-B	10/7/2020	9:50	ND	6.76	ND	16.62	NA	NA	
	10/21/2020	7:45	ND	6.00	ND	16.25	NA	NA	
	11/4/2020	5:30	ND	6.08	ND	16.33	NA	NA	
	11/18/2020	8:15	ND	6.17	ND	16.31	NA	NA	
	12/1/2020	9:00	ND	5.67	ND	16.29	NA	NA	
	12/16/2020	7:35	ND	6.09	ND	16.18	NA	NA	
	12/29/2020	7:35	ND	5.92	ND	16.23	NA	NA	
	1/13/2021	8:00	ND	6.14	ND	16.31	NA	NA	
	1/27/2021	7:20	ND	6.38	ND	16.34	NA	NA	
	2/8/2021	7:50	ND	6.32	ND	17.31	NA	NA	
	2/24/2021	7:15	ND	6.16	ND	16.29	NA	NA	
	3/10/2021	9:10	ND	6.24	ND	16.29	NA	NA	
	3/24/2021	8:32	ND	6.36	ND	16.19	NA	NA	
	4/7/2021	7:50	ND	6.10	ND	16.23	NA	NA	
	4/21/2021	8:35	ND	5.82	ND	16.23	NA	NA	
MW-C	10/7/2020	9:55	ND	6.91	ND	13.83	NA	NA	
	10/21/2020	7:55	ND	6.52	ND	13.84	NA	NA	
	11/4/2020	5:40	ND	6.45	ND	13.91	NA	NA	
	11/18/2020	8:25	ND	6.59	ND	14.19	NA	NA	
	12/1/2020	9:05	ND	6.31	ND	13.84	NA	NA	
	12/16/2020	7:40	ND	6.50	ND	13.85	NA	NA	
	12/29/2020	7:40	ND	6.27	ND	13.60	NA	NA	
	1/13/2021	8:05	ND	6.49	ND	13.71	NA	NA	
	1/27/2021	7:25	ND	6.70	ND	13.93	NA	NA	
	2/8/2021	8:00	ND	6.69	ND	13.86	NA	NA	
	2/24/2021	7:20	ND	6.58	ND	13.92	NA	NA	
	3/10/2021	9:15	ND	6.26	ND	13.88	NA	NA	
	3/24/2021	8:41	ND	6.78	ND	13.82	NA	NA	
	4/7/2021	7:55	ND	6.61	ND	13.82	NA	NA	
	4/21/2021	8:40	ND	6.31	ND	13.82	NA	NA	
MW-D	10/7/2020	10:05	ND	7.90	ND	15.60	NA	NA	
	10/21/2020	8:00	ND	7.71	ND	15.65	NA	NA	
	11/4/2020	5:45	ND	7.41	ND	15.69	NA	NA	
	11/18/2020	8:30	ND	7.41	ND	15.98	NA	NA	
	12/1/2020	9:10	ND	7.23	ND	15.72	NA	NA	
	12/16/2020	7:45	ND	7.17	ND	15.57	NA	NA	
	12/29/2020	7:45	ND	7.13	ND	15.60	NA	NA	
	1/13/2021	8:10	ND	7.40	ND	15.70	NA	NA	
	1/27/2021	7:30	ND	7.44	ND	15.62	NA	NA	
	2/8/2021	8:15	ND	7.72	ND	15.63	NA	NA	
	2/24/2021	7:30	ND	7.59	ND	15.59	NA	NA	
	3/10/2021	9:25	ND	7.23	ND	15.54	NA	NA	
	3/24/2021	8:29	ND	7.51	ND	15.53	NA	NA	
	4/7/2021	8:00	ND	7.35	ND	15.58	NA	NA	
	4/21/2021	8:45	ND	7.14	ND	15.59	NA	NA	
NW-1	10/7/2020	10:30	ND	9.30	ND	27.03	NA	NA	
	10/21/2020	8:35	ND	9.06	ND	27.08	NA	NA	
	11/4/2020	6:30	ND	8.90	ND	27.00	NA	NA	
	11/18/2020	10:15	ND	8.93	ND	28.22	NA	NA	
	12/1/2020	9:55	ND	8.70	ND	27.05	NA	NA	
	12/16/2020	8:50	ND	8.77	ND	26.89	NA	NA	
	12/29/2020	8:40	ND	8.59	ND	26.97	NA	NA	
	1/13/2021	8:25	ND	8.89	ND	26.98	NA	NA	
	1/27/2021	8:40	ND	8.95	ND	26.98	NA	NA	
	2/8/2021	9:35	ND	9.08	ND	27.02	NA	NA	
	2/24/2021	8:40	ND	8.98	ND	26.97	NA	NA	
	3/10/2021	9:50	ND	8.76	ND	27.04	NA	NA	
	3/24/2021	8:53	ND	8.92	ND	27.04	NA	NA	
	4/7/2021	8:05	ND	8.81	ND	27.62	NA	NA	
	4/21/2021	8:50	ND	8.43	ND	27.02	NA	NA	
NW-2	10/7/2020	10:55	ND	9.11	ND	24.62	NA	NA	
	10/21/2020	8:30	ND	9.01	ND	24.73	NA	NA	
	11/4/2020	6:40	ND	9.00	ND	24.77	NA	NA	
	11/18/2020	10:10	ND	9.06	ND	25.69	NA	NA	
	12/1/2020	9:50	ND	8.62	ND	24.82	NA	NA	
	12/16/2020	8:55	ND	8.86	ND	24.66	NA	NA	
	12/29/2020	8:45	ND	8.79	ND	24.68	NA	NA	
	1/13/2021	8:20	ND	9.93	ND	24.72	NA	NA	
	1/27/2021	8:45	ND	8.99	ND	24.66	NA	NA	
	2/8/2021	9:40	ND	9.24	ND	24.71	NA	NA	
	2/24/2021	8:50	ND	9.06	ND	24.56	NA	NA	
	3/10/2021	9:55	ND	8.98	ND	24.68	NA	NA	
	3/24/2021	8:50	ND	8.99	ND	24.62	NA	NA	
	4/7/2021	8:10	ND	8.87	ND	24.54	NA	NA	
	4/21/2021	8:55	ND	8.58	ND	24.61	NA	NA	

Table 1
Polychrome East
Yonkers, NY
Well Gauging Measurements

Well ID	Date:	Time:	Depth to LNAPL (Ft.)	Depth to Water (Ft.)	Depth to DNAPL (Ft.)	Total Depth (Ft.)	LNAPL Thickness (Ft.)	DNAPL Thickness (Ft.)	Comments
NW-3	**10/7/2020**	**11:45**	**ND**	**6.30**	**16.01**	**18.58**	**NA**	**2.57**	**Pre-pumping measurement**
	10/14/2020	**8:00**	**ND**	**6.20**	**ND**	**18.40**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	10/21/2020	**10:10**	**ND**	**6.26**	**15.04**	**18.63**	**NA**	**3.59**	**Pre-pumping measurement**
	10/21/2020	**12:45**	**ND**	**6.26**	**ND**	**18.63**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	11/4/2020	**8:00**	**ND**	**6.30**	**15.55**	**18.72**	**NA**	**3.17**	**Pre-pumping measurement**
	11/5/2020	**8:15**	**ND**	**6.35**	**ND**	**18.74**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	11/18/2020	11:05	ND	7.42	16.14	18.96	NA	2.82	
	11/19/2020	**7:45**	**ND**	**7.41**	**16.12**	**18.95**	**NA**	**2.83**	**Pre-pumping measurement**
	11/19/2020	**8:00**	**ND**	**7.43**	**ND**	**18.97**	**NA**	**NA**	**Post-pumping measurement ~10 -gallons removed**
	12/1/2020	**10:30**	**ND**	**6.11**	**15.40**	**18.69**	**NA**	**3.29**	**Pre-pumping measurement**
	12/2/2020	**8:35**	**ND**	**6.09**	**ND**	**18.72**	**NA**	**NA**	**Post-pumping measurement ~30 -gallons removed**
	12/16/2020	**10:30**	**ND**	**6.21**	**16.25**	**18.68**	**NA**	**2.43**	**Pre-pumping measurement**
	12/18/2020	**9:45**	**ND**	**6.40**	**ND**	**18.62**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	12/29/2020	10:30	ND	6.20	17.70	18.65	NA	0.95	
	12/30/2020	**8:15**	**ND**	**6.19**	**17.70**	**18.65**	**NA**	**0.95**	**Pre-pumping measurement**
	12/30/2020	**8:45**	**ND**	**6.17**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	1/13/2021	9:55	ND	6.18	15.21	18.65	NA	3.44	
	1/14/2021	**7:40**	**ND**	**6.18**	**15.05**	**18.65**	**NA**	**3.60**	**Pre-pumping measurement**
	1/14/2021	**7:50**	**ND**	**6.54**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~5 -gallons removed**
	1/27/2021	10:25	ND	6.36	16.40	18.73	NA	2.33	
	1/28/2021	**7:50**	**ND**	**6.60**	**16.40**	**18.73**	**NA**	**2.33**	**Pre-pumping measurement**
	1/28/2021	**7:55**	**ND**	**6.70**	**ND**	**18.73**	**NA**	**NA**	**Post-pumping measurement ~4 -gallons removed**
	2/8/2021	10:30	ND	6.35	16.91	18.60	NA	1.69	
	2/11/2021	**9:45**	**ND**	**6.36**	**16.95**	**18.60**	**NA**	**1.65**	**Pre-pumping measurement**
	2/11/2021	**10:00**	**ND**	**6.40**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	2/24/2021	10:00	ND	6.30	16.75	18.59	NA	1.84	
	2/25/2021	**7:40**	**ND**	**6.32**	**16.75**	**18.59**	**NA**	**1.84**	**Pre-pumping measurement**
	2/25/2021	**7:45**	**ND**	**6.33**	**ND**	**18.60**	**NA**	**NA**	**Post-pumping measurement ~3 -gallons removed**
	3/10/2021	11:10	ND	6.26	16.42	18.70	NA	2.28	
	3/11/2021	**7:55**	**ND**	**6.25**	**16.22**	**18.70**	**NA**	**2.28**	**Pre-pumping measurement**
	3/11/2021	**8:10**	**ND**	**6.26**	**ND**	**18.71**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	3/24/2021	9:43	ND	6.28	17.55	18.60	NA	1.05	
	3/25/2021	**8:20**	**ND**	**6.19**	**17.45**	**18.61**	**NA**	**1.16**	**Pre-pumping measurement**
	3/25/2021	**8:30**	**ND**	**6.18**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	4/7/2021	8:15	ND	6.22	17.74	18.69	NA	0.95	
	4/8/2021	**6:50**	**ND**	**6.21**	**17.68**	**18.69**	**NA**	1.01	**Pre-pumping measurement**
	4/8/2021	**7:44**	**ND**	**6.26**	**ND**	**18.65**	**NA**	**NA**	**Post-pumping measurement ~6.5 gallons removed**
	4/21/2021	9:00	ND	6.16	17.79	18.64	NA	0.85	
	4/22/2021	**7:20**	**ND**	**6.18**	**17.40**	**18.64**	**NA**	**1.24**	**Pre-pumping measurement**
	4/22/2021	**7:40**	**ND**	**6.21**	**ND**	**18.64**	**NA**	**NA**	**Post-pumping measurement ~9 gallons removed**
NW-4	**10/7/2020**	**11:35**	**ND**	**7.41**	**16.21**	**17.23**	**NA**	**1.02**	**Pre-pumping measurement**
	10/14/2020	**7:50**	**ND**	**7.33**	**ND**	**17.33**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	10/21/2020	9:50	ND	7.27	17.15	17.26	NA	0.11	
	11/4/2020	**7:45**	**ND**	**7.37**	**16.07**	**17.33**	**NA**	**1.26**	**Pre-pumping measurement**
	11/5/2020	**8:00**	**ND**	**7.37**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	11/18/2020	10:55	ND	7.48	16.25	17.86	NA	1.61	
	11/19/2020	**8:15**	**ND**	**7.46**	**16.27**	**17.84**	**NA**	**1.57**	**Pre-pumping measurement**
	11/19/2020	**8:30**	**ND**	**7.48**	**ND**	**17.87**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/1/2020	**10:40**	**ND**	**7.17**	**16.65**	**17.30**	**NA**	**0.65**	**Pre-pumping measurement**
	12/2/2020	**8:05**	**ND**	**7.14**	**ND**	**17.32**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	12/16/2020	**10:50**	**ND**	**7.35**	**16.75**	**17.32**	**NA**	**0.57**	**Pre-pumping measurement**
	12/18/2020	**9:30**	**ND**	**7.40**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
	12/29/2020	10:20	ND	7.31	16.30	17.35	NA	1.05	
	12/30/2020	**7:15**	**ND**	**7.28**	**16.29**	**17.35**	**NA**	**1.06**	**Pre-pumping measurement**
	12/30/2020	**7:45**	**ND**	**7.25**	**ND**	**17.36**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/13/2021	9:50	ND	7.38	16.34	17.35	NA	1.01	
	1/14/2021	**7:15**	**ND**	**7.42**	**16.35**	**17.35**	**NA**	**1.00**	**Pre-pumping measurement**
	1/14/2021	**7:35**	**ND**	**7.91**	**ND**	**17.35**	**NA**	**NA**	**Post-pumping measurement ~5 gallons removed**
	1/27/2021	10:40	ND	7.55	16.25	17.45	NA	1.20	
	1/28/2021	**7:30**	**ND**	**7.60**	**16.25**	**17.45**	**NA**	**1.20**	**Pre-pumping measurement**
	1/28/2021	**7:45**	**ND**	**7.78**	**ND**	**17.45**	**NA**	**NA**	**Post-pumping measurement ~4 gallons removed**
	2/8/2021	10:50	ND	7.48	16.80	17.40	NA	0.60	
	2/11/2021	**9:30**	**ND**	**7.50**	**16.80**	**17.38**	**NA**	**0.58**	**Pre-pumping measurement**
	2/11/2021	**9:40**	**ND**	**7.60**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	2/24/2021	10:10	ND	7.46	16.68	17.39	NA	0.71	
	2/25/2021	**7:50**	**ND**	**7.46**	**16.65**	**17.39**	**NA**	**0.74**	**Pre-pumping measurement**
	2/25/2021	**7:55**	**ND**	**7.47**	**ND**	**17.40**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	3/10/2021	11:20	ND	7.45	17.04	17.40	NA	0.36	
	3/11/2021	**7:30**	**ND**	**7.49**	**16.66**	**17.40**	**NA**	**0.74**	**Pre-pumping measurement**
	3/11/2021	**7:36**	**ND**	**7.55**	**ND**	**17.39**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	3/24/2021	9:36	ND	7.48	17.21	17.41	NA	0.20	
	3/25/2021	**7:55**	**ND**	**7.39**	**17.18**	**17.38**	**NA**	**0.20**	**Pre-pumping measurement**
	3/25/2021	**8:10**	**ND**	**7.08**	**ND**	**17.39**	**NA**	**NA**	**Post-pumping measurement ~2 gallons removed**
	4/7/2021	8:20	ND	7.22	17.30	17.40	NA	0.10	
	4/8/2021	**6:45**	**ND**	**7.22**	**17.30**	**17.40**	**NA**	**0.10**	**Pre-pumping measurement**
	4/8/2021	**7:29**	**ND**	**7.31**	**ND**	**17.43**	**NA**	**NA**	**Post-pumping measurement ~1.5 gallons removed**
	4/21/2021	9:05	ND	7.14	17.29	17.40	NA	0.11	
	4/22/2021	**8:10**	**ND**	**7.17**	**17.11**	**17.40**	**NA**	**0.29**	**Pre-pumping measurement**
	4/22/2021	**8:15**	**ND**	**7.36**	**ND**	**17.39**	**NA**	**NA**	**Post-pumping measurement ~3 gallons removed**
NW-5	10/7/2020	10:20	ND	7.95	ND	10.55	NA	NA	
	10/21/2020	8:40	ND	7.67	ND	10.50	NA	NA	
	11/4/2020	6:50	ND	7.27	ND	10.62	NA	NA	
	11/18/2020	6:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/1/2020	9:45	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/16/2020	8:30	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	12/29/2020	8:50	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/13/2021	10:00	NA	NA	NA	NA	NA	NA	Inaccessible due to siding staged over well.
	1/27/2021	8:35	ND	7.48	ND	10.70	NA	NA	
	2/8/2021	9:50	ND	7.72	ND	10.57	NA	NA	
	2/24/2021	8:30	ND	7.50	ND	10.56	NA	NA	
	3/10/2021	9:40	ND	7.19	ND	10.55	NA	NA	
	3/24/2021	8:45	ND	7.45	ND	10.46	NA	NA	
	4/7/2021	8:25	ND	4.35	ND	10.49	NA	NA	
	4/21/2021	9:10	ND	4.06	ND	10.51	NA	NA	

Notes: **Pre/post pumping event readings are bolded.**
LNAPL - Light Non-Aqueous Phase Liquid
DNAPL - Dense Non-Aqueous Phase Liquid
NA - Not Applicable

Table 2
Polychrome East
Yonkers, NY
DNAPL Recovery Totals

Recovery Event	DNAPL Recovered Volume (gal)						Disposal Info		
	NW-1	NW-2	NW-3	NW-4	NW-5	Event Total	Date Generated	Off-Site Disposal Date	Disposal Location
Dec-19	NA	NA	1.5	7	NA	8.5	12/31/2019	2/21/2020	Veolia ES
2020 Total	NA	NA	149.5	121.5	NA	271	1/9/2020 – 12/30/2020	2/21/2020 – 2/11/2021	Veolia ES
Jan-21	NA	NA	9	9	NA	18	1/14, 1/28	2/11/2021	Veolia ES
Feb-21	NA	NA	6	4	NA	10	2/11, 2/25	Pending	Veolia ES
Mar-21	NA	NA	7	4	NA	11	3/11, 3/25	Pending	Veolia ES
Apr-21	NA	NA	15.5	4.5	NA	20	3/11, 3/25	Pending	Veolia ES
				TOTAL TO DATE:		**338.5**	gallons		

Notes: *** On February 11, 2021, Veolia ES disposed of 14 gallons of DNAPL generated at NW-3 and NW-4 on December 18 and 30, 2020 and 18 gallons of DNAPL generated at NW-3 and NW-4 on January 14 and 28, 2021. The 10 gallons of DNAPL that were generated at NW-3 and NW-4 on February 11 and 25, 2021, the 11 gallons of DNAPL that were generated at NW-3 and NW-4 on March 11 and 25, 2021, and the 20 gallons of DNAPL that were generated at NW-3 and NW-4 on April 8 and 22, 2021 are currently pending off-site disposal.**

DNAPL - Dense Non-Aqueous Phase Liquid

NA - Not Applicable

APPENDIX I

IMPORTED BACKFILL DOCUMENTATION

TILCON

A CRH COMPANY

TILCON NEW YORK INC.

162 OLD MILL ROAD
WEST NYACK, NY 10994
New York Orders : (800) 872-7762
New Jersey Orders : (800) 789-7625

Ticket #: 41634188

Ticket #	Date	Time	Dispatch	Plant #	Plant Description	Source	Facility ID
41634188	08/26/2020	14:02		00416	Bronx Stone Terminal 718-6(		03W39R

Sold To:
Casale, Tony Inc.
Job Description:
YONKERS

Customer #	Order #	Purchase Order
4137		

Zone	Truck #	Hauler
	85801MN	888888 FOB Vendor

Product #	Product Description	DOT Mix ID	Delivery Method
1015012	3/4" STONE - QUARRY		Pickup

353

Loads: 1.00 **Accum Amount:** 9.00 Cubic ` 8.16 Metric Tonnes

GROSS: 0 L
TARE: 0 L
NET: 0 L

This Load: 9.00 Cubic Yard

Weighmaster Melanie Vaquerano

TILCON NEW YORK, INC. ISSUES THIS RECEIPT SOLELY FOR THE PURPOSE OF ESTABLISHING WEIGHT.OPERATION OF THIS VEHICLE IN EXCESS OF ALLOWABLE LEGAL PERMITS MAY RESULT IN DELAY OF THE VEHICLE AND/OR ARREST OF ITS OPERATOR. WE ARE NOT RESPONSIBLE FOR DAMAGE WHEN DELIVERY IS ORDERED OFF PUBLIC ROADS ANY DAMAGE WILL BE CHARGED TO THE CUSTOMER

Received By: _____ **Driver Name:** _____

TILCON

A CRH COMPANY

TILCON NEW YORK INC.
162 OLD MILL ROAD
WEST NYACK, NY 10994
New York Orders : (800) 872-7762
New Jersey Orders : (800) 789-7625

Ticket #: 20951521

Ticket #	Date	Time	Dispatch	Plant #	Plant Description	Source	Facility ID
20951521	09/18/2019	06:23		00209	West Nyack Quarry 845-353-04	8-8R	

Sold To:
Casale, Tony Inc.
Job Description:
AVALON ALEXANDER STREET

Customer #	Order #	Purchase Order
4137	Q319983	

Zone	Truck #	Hauler
62134-3	AT175J	888888 FOB Vendor

Product #	Product Description	DOT Mix ID	Delivery Method
1010001	SCREENINGS/ASTM 10		Pickup

Loads: 1 **Accum Amount:** 37.40 Tons 33.93 Metric Tonnes

GROSS: 113,820 L
TARE: 39,020 L
NET: 74,800 L

This Load: 37.40 Tons 33.93 Metric Tonnes

Weighmaster Steve Collins

TILCON NEW YORK, INC. ISSUES THIS RECEIPT SOLELY FOR THE PURPOSE OF ESTABLISHING WEIGHT.OPERATION OF THIS VEHICLE IN EXCESS OF ALLOWABLE LEGAL PERMITS MAY RESULT IN DELAY OF THE VEHICLE AND/OR ARREST OF ITS OPERATOR. WE ARE NOT RESPONSIBLE FOR DAMAGE WHEN DELIVERY IS ORDERED OFF PUBLIC ROADS ANY DAMAGE WILL BE CHARGED TO THE CUSTOMER

Received By: _____ **Driver Name:** Brian

TILCON
A CRH COMPANY

TILCON NEW YORK INC.
162 OLD MILL ROAD
WEST NYACK, NY 10994
New York Orders : (800) 872-7762
New Jersey Orders : (800) 789-7625

Ticket #: 20951523

Ticket #	Date	Time	Dispatch	Plant #	Plant Description	Source	Facility ID
20951523	09/18/2019	06:24		00209	West Nyack Quarry 845-353-04	8-8R	

Sold To:
Casale, Tony Inc.
Job Description:
AVALON ALEXANDER STREET

Customer #	Order #	Purchase Order
4137	Q319983	

Zone	Truck #	Hauler
62134-3	AR479H	888888 FOB Vendor

Product #	Product Description	DOT Mix ID	Delivery Method
1010001	SCREENINGS/ASTM 10		Pickup

Loads: 2 **Accum Amount:** 59.91 Tons 54.35 Metric Tonnes

GROSS: 75,620 L
TARE: 30,600 L
NET: 45,020 L

This Load: 22.51 Tons 20.42 Metric Tonnes

Weighmaster Steve Collins

TILCON NEW YORK, INC. ISSUES THIS RECEIPT SOLELY FOR THE PURPOSE OF ESTABLISHING WEIGHT.OPERATION OF THIS VEHICLE IN EXCESS OF ALLOWABLE LEGAL PERMITS MAY RESULT IN DELAY OF THE VEHICLE AND/OR ARREST OF ITS OPERATOR. WE ARE NOT RESPONSIBLE FOR DAMAGE WHEN DELIVERY IS ORDERED OFF PUBLIC ROADS ANY DAMAGE WILL BE CHARGED TO THE CUSTOMER

Received By: _____ **Driver Name:** _____

DRIVER CERTIFICATION: WE ARE NOT RESPONSIBLE FOR DAMAGE WHEN

20951574

DISPATCH
CUSTOMER 4137 Caisale Tony Inc
SALES ORDER Q319983
PURCHASE ORDER
TRUCK AT176J
HAULER 888888 FOB Vendor
DELIVERY METHOD Pickup ZONE CODE 62134-3

ITEM CODE 1010001
DESCRIPTION SCREENINGS/ASTM 10

DELIVERY ADDRESS
AVALON ALEXANDER STREET

INSTRUCTIONS

OFF JOB TIME				
	GROSS	0,860	lb	55 43 UT
	TARE	39,020	lb	19 51 UT
	NET	71,840	lb	35 92 UT

ON JOB TIME	# OF LOADS	US TONS TODAY	METRIC TONS TODAY
	3	95 83	86 94

TICKET 20951574

DATE 9/18/2019
TIME 08 32

DRIVER SIGNATURE Brett R

CUSTOMER SIGNATURE

LOCATION 00209 West Nyack Quarry
SOURCE 8-8R FACILITY ID
SCALE WEIGHMASTER Steve Collins

CON NEW YORK INC ISSUES THIS RECEIPT SOLELY FOR THE PURPOSE OF ESTABLISHING WEIGHT OPERATION OF THIS VEHICLE IN EXCESS OF LOW AB ILLEGAL PERMITS MAY RESULT IN DELAY OF THE VEHICLE AND/OR

TILCON

A CRH COMPANY

TILCON NEW YORK INC.
162 OLD MILL ROAD
WEST NYACK, NY 10994
New York Orders : (800) 872-7762
New Jersey Orders : (800) 789-7625

Ticket #: 20951591

Ticket #	Date	Time	Dispatch	Plant #	Plant Description	Source	Facility ID
20951591	09/18/2019	08:48		00209	West Nyack Quarry 845-353-04	8-8R	

Sold To:
Casale, Tony Inc.
Job Description:
AVALON ALEXANDER STREET

Customer #	Order #	Purchase Order
4137	Q319983	

Zone	Truck #	Hauler
62134-3	AR479H	888888 FOB Vendor

Product #	Product Description	DOT Mix ID	Delivery Method
1010001	SCREENINGS/ASTM 10		Pickup

Loads: 4 **Accum Amount:** 117.74 Tons 106.82 Metric Tonnes

GROSS: 74,420 L
TARE: 30,600 L
NET: 43,820 L

This Load: 21.91 Tons 19.88 Metric Tonnes

Weighmaster Steve Collins

TILCON NEW YORK, INC. ISSUES THIS RECEIPT SOLELY FOR THE PURPOSE OF ESTABLISHING WEIGHT.OPERATION OF THIS VEHICLE IN EXCESS OF ALLOWABLE LEGAL PERMITS MAY RESULT IN DELAY OF THE VEHICLE AND/OR ARREST OF ITS OPERATOR. WE ARE NOT RESPONSIBLE FOR DAMAGE WHEN DELIVERY IS ORDERED OFF PUBLIC ROADS ANY DAMAGE WILL BE CHARGED TO THE CUSTOMER

Received By: _____ **Driver Name:** _____