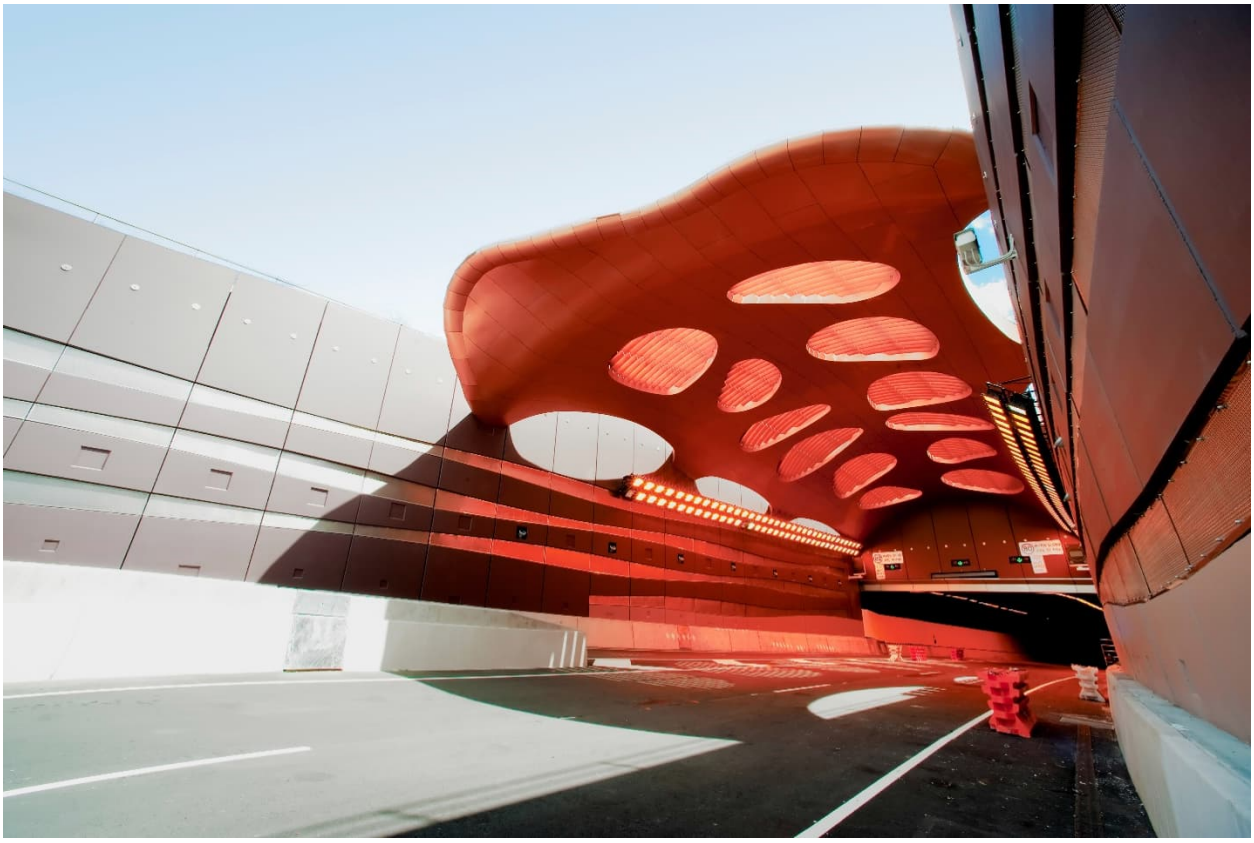
EMERSUB 16 LLC

2024 OFFSITE GROUNDWATER MONITORING REPORT

FORMER KOP-FLEX FACILITY SITE, HANOVER, MARYLAND

July 21, 2025



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FORMER KOP-FLEX FACILITY SITE, HANOVER, MARYLAND

EMERSUB 16 LLC

PROJECT NO.: US-WSP-31405608.011
DATE: JULY 21, 2025

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1 INTRODUCTION

On behalf of EMERSUB 16 LLC, WSP USA Inc. (WSP) has prepared this Offsite Groundwater Monitoring Report for activities performed in 2024 to assess the water quality conditions with respect to the groundwater plume emanating from the Former Kop-Flex Facility Site (Site) located at 7555 Harmans Road in Hanover, Maryland (Figure 1). The Site is identified as MD0286 under the Brownfield Master Inventory system used by the Maryland Department of the Environment (MDE) Land Restoration Program. This report pertains to the MDE-approved response action activities that are being conducted to address the groundwater impacts in the offsite area of the Site, which includes non-residential (light industrial) facilities bordering the former Kop-Flex facility to the north (Verizon Communications), and south and east (Williams Scotsman, Inc.), along with residential communities and commercial businesses to the south of Maryland Route 100.

Previous environmental investigations initiated in 1996 identified soil and groundwater impacts associated with historical releases of chlorinated solvents at the Site. The results of investigations conducted in the offsite areas also showed that chlorinated volatile organic compounds (VOCs) and 1,4-dioxane contained in the solvents had migrated to the south and southeast within the deep zone of the Lower Patapsco aquifer underlying the former facility. Since that time, an offsite groundwater monitoring plan has been developed in conjunction with the implementation of an onsite hydraulic containment system in 2017. The objectives of the ongoing monitoring program are to evaluate the trends in concentrations of site-related constituents of concern (COCs) in the aquifer system downgradient of the former Kop-Flex facility and assess whether additional actions are warranted to prevent exposure to these Site-derived constituents by homeowners who use private wells as their drinking water source.

This 2024 Offsite Groundwater Monitoring Report consists of the following sections:

- Section 2 – Site Description and Background
- Section 3 – Environmental Setting and Hydrogeology
- Section 4 – Groundwater Monitoring Plan Sampling Procedures
- Section 5 – 2024 Sampling Results
- Section 6 – Summary and Conclusions, including planned 2025 monitoring activities.

2 SITE DESCRIPTION

The Site is located at 7555 Harmans Road in Hanover, Anne Arundel County, Maryland. The Site occupies a total area of approximately 25 acres and contains three buildings - two buildings used as office and warehouse/operations space by the current operator – Catalent Biologics (Catalent)- and a small groundwater treatment facility operated by WSP in the west-central portion of the property (Figure 1). The two large buildings were constructed during re-development of the property in 2016. The property is bordered to the north, east and south by light industrial operations and to the west by undeveloped land along Stony Run (a tributary of the Patapsco River) and Harmans Road.

The former facility was constructed on previously undeveloped land in 1969 by Koppers Company, Inc., a predecessor in real estate interest of Kop-Flex, Inc. Emerson Electric Co. (Emerson) acquired Kop-Flex in 1996 and continued manufacturing activities until facility operations ceased in late 2012. In December 2014, Emerson transferred the property to its wholly owned subsidiary EMERSUB 16 LLC, which subsequently sold the property. The property is currently owned and operated by Catalent Harmans Road, LLC (Catalent).

During 2016 and early 2017, the property was redeveloped for commercial use, with the construction of two new buildings separated by a truck loading area (Figure 1). At present, Catalent is making modifications to the interior of the South Building for future business operations.

Much of the broader neighborhood in which the Site is located is primarily characterized by residential developments (single-family homes and townhouses) and undeveloped land (Figure 1). A small number of areas, primarily to the north and east, are subject to commercial and light industrial/industrial park uses. The following table summarizes the nearby land uses.

Direction	Operator Name	Address	Property Use
North	Verizon	7545 Harmans Road	Maintenance Operations Facility
South	William Scotsman, beyond which is Maryland State Route 100	7539 Harmans Road	Mobile Trailer Distributor – Office/Fabrication Building and Trailer Storage
East	William Scotsman, beyond which are railroad tracks	7539 Harmans Road	Mobile Trailer Distributor – Office/Fabrication Building and Trailer Storage
West	Stony Run with surrounding undeveloped land and Harmans Preserve	-----	Open space and residences (townhomes)

3 ENVIRONMENTAL SETTING

3.1 TOPOGRAPHY AND SURFACE DRAINAGE

Anne Arundel County is located within the Atlantic Coastal Plain Physiographic Province. The Hanover-Severn area is situated approximately 5 miles from the Fall Line, which marks the boundary at the ground surface between the unconsolidated deposits of the Coastal Plain and the igneous and metamorphic crystalline rocks of the Piedmont Physiographic Province. Based on the United States Geological Survey (USGS) topographic 7.5-minute series quadrangle map for Relay, Maryland (revised 1974), the Site lies within an area of rolling to hilly terrain dissected by numerous perennial to intermittent streams. Overall, the highest elevations (greater than 200 feet above mean sea level [MSL]) occur in the Hanover-Severn area south and west of the former Kop-Flex facility with the lowest area (approximately 90 feet above MSL) present to the north along Stony Run.

According to the USGS topographic map, the closest stream is Stony Run, which flows across the northwestern portion of the former Kop-Flex property. Streamflow associated with the Stony Run drainage system progresses northward and eventually discharges into the Patapsco River. Additionally, numerous small, predominately man-made pond areas have been identified and mapped in the vicinity of Stony Run and its tributaries in the Hanover-Severn area. The largest of these is a hydrologically isolated pond located approximately 0.3 mile south of the site in the Harmans Woods community.

3.2 LOCAL GEOLOGIC AND HYDROGEOLGIC SETTING

Evaluation of the borehole lithologic data within the context of the regional stratigraphic framework indicates the unconsolidated deposits in the Hanover-Severn area include units of the Lower Cretaceous Potomac Group. The most detailed lithologic information is provided by the logging of cores obtained from boreholes drilled by WSP for the onsite and offsite monitoring wells. Construction details for the offsite wells are provided in Table 1. Based on the borehole data, the following discussion provides an overview of the geologic conditions in the onsite and offsite areas.

The youngest deposits at the Site are a combination of Quaternary alluvial sediments associated with the depositional processes along Stony Run and its tributaries, and fill materials associated with historical Site development. Based on the boring logs, the maximum thickness of these deposits in this area is approximately 20 feet as shown on the geologic cross section in Figure 2.

Lower Cretaceous litho-stratigraphic units underlie the Quaternary-age deposits down to an elevation of greater than -300 feet mean sea level (MSL). The primary Cretaceous-age litho-stratigraphic units and their corresponding hydro-stratigraphic equivalents beneath the former Kop-Flex facility and offsite area, from youngest (shallowest) to oldest (deepest), include the following (Figure 2):

- Patapsco Formation (Upper Patapsco aquifer, Lower Patapsco confining unit and Lower Patapsco aquifer)
- Arundel Clay (Arundel Clay confining unit)
- Patuxent Formation (Patuxent aquifer)

Specific information on the Lower Patapsco and Patuxent aquifers and Arundel Clay confining unit, along with general information regarding the transport of dissolved contaminants within the aquifer system, is provided in the conceptual hydrogeologic model discussed in the following section.

3.3 CONCEPTUAL HYDROGEOLOGIC MODEL

3.3.1 UPPER PATAPSCO AQUIFER

The Upper Patapsco aquifer is the shallowest hydrogeologic unit within the Hanover-Severn, Maryland area. The Upper Patapsco is not present at the former Kop-Flex Facility Site but effectively starts 0.8 miles to the southeast. Based on the hydrogeologic cross-section, the outcrop area[1] for this aquifer extends from the vicinity of Telegraph Road (Maryland Route 170) south and east toward Clark Station Road and WB&A Road. The aquifer is comprised of mostly fine to medium-grained sands, which are interbedded with clay deposits, and is underlain by clayey deposits that serve as the confining unit for the Lower Patapsco aquifer.

Given the shallow depth of the Upper Patapsco aquifer in the area of interest, groundwater is presumed to occur under an unconfined condition where the top of the aquifer coincides with the water table. Detailed information on the aquifer depth is limited due to a lack of data from shallow wells installed in the residential areas east of Telegraph Road. Based on the lithologic log for monitoring well MW-34D located a short distance east of Telegraph Road, the Upper Patapsco aquifer in this area occurs to a depth of approximately 45 feet (Figure 2).

Constituents released at the Former Kop-Flex Facility Site would not be present in the Upper Patapsco aquifer. Rather, to the extent they have migrated downgradient, they would be in the deeper zone of the Lower Patapsco aquifer. Groundwater present in the Upper Patapsco aquifer derives from the infiltration of precipitation over the outcrop area. The upward movement of groundwater from the underlying Lower Patapsco aquifer is not a contributing source of water to this hydrogeologic unit.

3.3.2 LOWER PATAPSCO AQUIFER

The Lower Patapsco aquifer occurs over the entire area of interest, which extends south and east from the Site to the residential communities beyond the portion of Telegraph Road south of Reece Road. The aquifer ranges in thickness from approximately 170 feet at the southern boundary of the Site to approximately 320 feet in the residential areas south of Reece Road (Figure 2). Overall, the aquifer in the area consists of a layered sequence of alternating sandy and clayey sediments with the layers dipping to the south and east.[2] The sand-dominated units are comprised of fine to coarse-grained sands with discontinuous lenses of fine-grained (silt and clay) sediments. These sandy zones are inter-layered with two regionally extensive units of predominately dense clay deposits of varying thickness.

A shallow sand layer occurs to depths ranging from 40-60 feet below ground surface (bgs) on and around the Site to 70-75 feet bgs in the Harmans Woods community to the south. Another shallow sand unit is present over a similar depth interval in the vicinity of Reece Road and to the south in the Andorick Acres community. In addition to these shallow sand units, a deep sand layer extends over the entire area. The depth to the top of this deep sand unit varies from 80-90 feet bgs on the southern portion of the Site to greater than approximately 200 feet bgs in the Andorick Acres community. The thickness of this unit is approximately 90 feet in the northern portion of the area of interest and 160 feet further south. Fine-grained sediments comprising a regionally extensive clayey layer separates the shallow and deep sand units and serves as a low permeability,

[1] An outcrop area comprises an area of land where the unconsolidated sediments comprising a geologic unit occur at or very close to the ground surface.
[2] In geologic terminology, dip refers to the 'tilting' of a bed or series of layered beds from a horizontal orientation. This tilting, or inclination, of the bed(s) typically results in the depth to a given bed increasing in the direction of dip.

leaky confining unit for the deep sand zone. This confining unit would act as a low permeability barrier limiting the movement of groundwater and dissolved COCs between the shallow and deep sand zones.

At the Site, groundwater in the shallow zone of the Lower Patapsco aquifer occurs under an unconfined condition, although semi-confined conditions may exist in areas where fine-grained clayey deposits are present in the shallow subsurface.[3] Evaluation of the water level data from the shallow onsite and offsite monitoring wells indicates the general direction of groundwater flow, is to the north and west within the shallow sand zone in the area (Figure 3). The direction of shallow groundwater movement generally mimics the overall local surface topography described above, with groundwater providing a source of water (*i.e.*, baseflow) to local streams, and wetland areas and surface water bodies near stream courses.

Groundwater occurs under leaky confined conditions in the deep sand zone of the Lower Patapsco aquifer at the Site.[4] Evaluation of the water level data from monitoring wells screened in this deep sand zone indicates generally south-southeast flow paths for groundwater moving through this portion of the Lower Patapsco aquifer (Figure 2).[5] (Further discussion of the groundwater flow system within the deep portion of the Lower Patapsco aquifer is provided in Section 5.2 of this report.) In addition, for the onsite area and offsite Harmans Woods community immediately south of Route 100, the water level elevations in monitoring wells screened in the shallow zone are higher than elevations in the deep monitoring wells (Figure 2). This difference in the water levels between the shallow and deep monitoring wells indicates the existence of hydrologic conditions that can result in the downward movement of groundwater, and associated dissolved constituents, from the shallow sand zone to the deep sand zone of the Lower Patapsco aquifer. The downward flow of groundwater would be controlled and limited by the low permeability clayey deposits that constitute the leaky confining unit that separates the sand zones. The water level data do not indicate conditions that would result in the upward flow of groundwater and dissolved constituents from the deep sand zone to the overlying shallow zone.

In summary, the Lower Patapsco aquifer at the Site consists of shallow (unconfined to semi-confined) and deep (leaky confined) sand units that serve as conduits for groundwater flow and associated transport of dissolved constituents. Groundwater in the shallow sand zone generally flows from the residential areas south of Maryland Route 100 (*e.g.*, the Harmans Woods community) to the north and west toward the former Kop-Flex facility and Stony Run, while groundwater in the deep sand zone flows in a south-southeastward direction. Hydrologic conditions cause groundwater and dissolved constituents to move vertically downward from the shallow to deep zones of the aquifer in the area. Dissolved VOCs that reached the deep sand zone underlying the former Kop-Flex facility would continue to migrate with water moving to the south-southeast through the sandy deposits in the deep portion of the Lower Patapsco aquifer. The presence of aquitards separating the deep and shallow zones of the Lower Patapsco aquifer also obviates the potential for VOCs to migrate through the saturated zone upward to the water table, volatilize into the soil vapor, and potentially spread to the ground surface in the downgradient, offsite area. In addition, the presence of a clay aquitard below the deep zone of the Lower Patapsco aquifer prevents constituents from migrating to the Patuxent aquifer, which underlies the Lower Patapsco aquifer.

Thus, COCs released to groundwater at the Former Kop-Flex Site will migrate downward. Some mass remains in the shallow zone of the Lower Patapsco aquifer and migrates to the north and west. Dissolved COCs that enter the deeper zone remain confined in that zone and migrate to the south and east.

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[3] A semi-confined aquifer is an aquifer that is partially overlain, or confined, by a layer(s) of low permeability material through which groundwater movement may occur.
[4] A leaky aquifer is an aquifer whose upper and lower boundaries consist of continuous low permeability materials through which groundwater movement may occur.
[5] In this report, when a reference is made to a deep monitoring well, it means that it is either screened in the deep confined portion of the Lower Patapsco aquifer, or in the Patuxent aquifer (described in Section 3.3.4).

3.3.3 ARUNDEL CLAY

The Arundel Clay underlies the Lower Patapsco aquifer and separates it from the Patuxent Aquifer (Figure 2). This unit consists predominately of hard, dense clay that ranges in color from gray to dark gray and red to very dark brown, with rare thin beds of well-graded sand. Organic (plant) matter is present throughout much of the clayey deposits comprising this litho-stratigraphic unit in the offsite area. Given the southeastward dipping, or tilting, of the geologic units in northern Anne Arundel County, the depth to the top of the Arundel Clay increases in a south and east direction from the former Kop-Flex property. Depths to the upper boundary of this unit vary from approximately 160 feet bgs at the southern Site boundary to 210 feet bgs at the MW-36 well location in the Harmans Woods community to approximately 370 feet bgs in the central portion of the Andorick Acres community. Based on the lithologic logs for offsite wells that were advanced through the Arundel Clay and into the underlying Patuxent Aquifer, the thickness for this unit ranges from approximately 40 feet to 120 feet over the Hanover-Severn area. The lithologic data indicates the Arundel Clay attains its maximum thickness in the northern portion of the area of interest – Site and Harmans Woods community – and decreases to less than 70 feet further south in the Andorick Acres neighborhood. The low permeability of the predominately clayey deposits indicates the Arundel Clay serves as a regionally extensive confining unit for the underlying Patuxent aquifer within the Coastal Plain aquifer system. Given the fact this thick aquitard separating the deep zone of the Lower Patapsco aquifer from the underlying Patuxent aquifer has a very low permeability, site-related contaminants that have migrated to the area to the south of the facility property are confined to the deep zone of the Lower Patapsco aquifer.

3.3.4 PATUXENT AQUIFER

The Patuxent aquifer is the deepest aquifer encountered in the Hanover-Severn area and comprises the porous sand deposits of the Patuxent Formation beneath the Arundel Clay. Detailed information on the lithologic characteristics of this hydro-stratigraphic unit is minimal in the area of interest due to the limited advancement of well boreholes into this aquifer.[6] Using the available borehole data, the depth to the top of the aquifer ranges from approximately 350 feet bgs in the Harmans Woods community (MW-36D location) to approximately 410 feet bgs in the Andorick Acres neighborhood. The aquifer depth is supported by the construction details for the residential well at 1409 Bittersweet Drive in the Andorick Acres community, which is completed at a depth of 465 feet bgs or approximately 50 feet below the aquifer's upper boundary. Based on regional hydrogeologic studies, the Patuxent aquifer is believed to approach a thickness of approximately 250 feet in northwestern Anne Arundel County.

Groundwater flow within the Patuxent aquifer occurs under leaky confined conditions, with the Arundel Clay comprising the confining unit. Evaluation of historical water level data collected from observation wells in northern Anne Arundel County indicated a generally eastward flow of groundwater within the Patuxent aquifer in the Hanover-Severn area. This flow direction, which differs from that determined for the deep sand zone of the overlying Lower Patapsco aquifer, is the result of withdrawals at a public water supply wellfield located along Dorsey Road to the east of the Site. Significant groundwater withdrawals from the Dorsey Road wellfield started in the 1960's and continue through 2024. Based on water supply studies conducted by the Maryland Geological Survey for the Anne Arundel County Department of Public Works, there have been no major changes to the average pumping from the Patuxent aquifer at this well field. Potentiometric levels determined from depth to water measurements at the two offsite monitoring wells screened in the Patuxent aquifer – MW-30D-413 and MW-

[6] Prior to the 2018 well installation activities, no monitoring wells had been completed in the Patuxent aquifer as part of the offsite groundwater investigation activities. The deeper well at the MW-30D location, as well as MW-36D were installed beneath the Arundel Clay to provide more hydrogeologic and geochemical information for this aquifer in the area of interest.

36D – are consistent with the eastward flow paths ascertained from the previous regional studies. The data from these wells further demonstrates that the Arundel Clay is serving as a competent aquitard, or hydraulic barrier, between the groundwater flow in the Lower Patapsco and Patuxent aquifers. Given the geology and direction of groundwater flow, dissolved constituents (including potentially VOCs) detected in the Patuxent aquifer in the Hanover-Severn area are most likely derived from source areas to the west and not via downward migration from the Lower Patapsco aquifer through the Arundel Clay confining unit or aquitard.

4 GROUNDWATER MONITORING PLAN AND FIELD PROCEDURES

4.1 OVERVIEW OF GROUNDWATER SAMPLING ACTIVITIES

The locations of the offsite monitoring wells are shown in Figure 4. Offsite groundwater monitoring activities were conducted during the second and fourth quarters of 2024. The monitoring activities completed during these quarters involved the collection of water level measurements and groundwater quality samples from all offsite monitoring wells screened in the Lower Patapsco and Patuxent aquifers. No site-wide groundwater monitoring activities were conducted during the first or third quarters of 2024. All activities were performed following WSP's standard operating procedures (SOP's) and the September 2015 *Offsite Groundwater Monitoring Plan* approved by MDE and the U.S. Environmental Protection Agency (EPA). Additional information regarding the semi-annual 2024 monitoring activities is provided below.

4.2 WATER LEVEL MEASUREMENTS

Depth-to-water measurements were collected from the offsite monitoring wells on four occasions in 2024. The second quarter (spring) gauging event took place on May 19, 2024; however, wells MW-30D-273, MW-31D, and MW-36D were inaccessible on that date due to parked vehicles. These wells were subsequently gauged on June 12, 2024, once access was available. Similarly, during the fourth quarter (fall) gauging event on November 11, 2024, wells MW-25D-130, MW-25D-192, and MW-31D were inaccessible. Follow-up measurements at these wells were completed on November 26, 2024.

The water level was measured at each offsite monitoring well using an electronic water level indicator to determine the hydraulic head within the portion of the aquifer system screened by the well. In addition, the total well depth was checked at the same time to identify potential siltation problems inside the well casing. All field measurements were recorded in a bound field notebook. Historical water level measurements for the offsite monitoring wells, including data from the 2024 gauging events, are included in Table 2.

4.3 HYDRASLEEVE SAMPLING

The HydraSleeve™ sampler was used to collect groundwater samples from the offsite monitoring wells in 2024. The HydraSleeve™ is a no-purge sampling device capable of collecting representative groundwater samples for analysis of a range of dissolved groundwater constituents, including VOCs and 1,4-dioxane.

Since initiation of the no-purge sampling method in late 2016, the groundwater samples were collected using standard-size HydraSleeve™ samplers that were 30-inches (2.5 feet) in length. The top of the samplers was deployed such that the water sample would be collected from the middle portion of the well screen (Table 3). In 2022, WSP decided to change the analytical method used to analyze the groundwater samples for 1,4-dioxane from USEPA SW-846 Method 8260D with selected ion monitoring (SIM) to the more accurate USEPA SW-846 Method 8270E with SIM. Given the larger sample volume necessary for the 8270E test method, the standard HydraSleeve™ was not able to retrieve enough water for the laboratory analysis and provide a sample aliquot for measurement of field hydrogeochemical parameters. Consequently, in December 2023, WSP switched to using longer (38-inch or 3.2-foot) HydraSleeve™ samplers, which would provide sufficient volume for all required laboratory and field analyses. In addition, monitoring well MW-25D-130 was fitted with a SuperSleeve sampling device, which has an even longer length of 5 feet, to provide the necessary volume to collect the

matrix spike/matrix spike duplicate (MS/MSD) samples. The top of the new HydraSleeves™ were suspended at the midpoint of the screen in each well such that retrieval would collect water from the overlying interval equal to the sampler length (Table 3). The new deployment depths differ from those for the previous (standard-size) HydraSleeve™ samplers, which were positioned at a depth slightly below the screen midpoint. Given the modified deployment depth and slightly greater sampler length, the newly deployed HydraSleeves™ samplers target a longer sampling interval within the upper portion of the well screen (Table 3).

The HydraSleeves™ were installed in the wells by attaching the samplers to a weighted, nylon suspension tether and setting the sampler at the pre-determined depth within the screened interval. The suspension line was secured at the wellhead to ensure the sampler remained at the designated depth during the stabilization period, which corresponded to the time between sampling events. The groundwater sample was collected by continuously pulling upward on the suspension line until the HydraSleeve™ was full. The HydraSleeve™ was removed from the well, and the water immediately transferred to the appropriate sample containers to minimize any diffusive loss of VOCs through the polyethylene wall of the sampler. After obtaining the requisite sample volume for chemical analysis, a representative amount of the remaining water was placed into the sample cup of a Horiba U-52 multi-parameter field meter for measurement of the following hydrogeochemical parameters:

- Temperature
- pH
- Specific conductivity
- Turbidity

The field parameter measurements for each sample were documented in a field notebook. Table 4 includes the field parameter measurements for the May 2024 sampling event, and Table 5 includes the field parameters from the November 2024 event.

Field geochemical parameters were collected during both events except as follows:

- Field parameters could not be collected in May from MW-25D-130 and MW-25D-190, where field duplicate and MS/MSD samples were collected because insufficient volume remained for the field measurements.
- Field parameters were not collected from MW-31D in May because the well was inaccessible. Follow-up sampling was conducted in June 2024; however, a water quality meter was not onsite during this event.
- Field parameters could not be collected in November from MW-25D-130, where the MS/MSD samples were collected, because insufficient volume remained for the field measurements.

Following sample collection and field parameter measurements, a new HydraSleeve™ sampler was deployed in the well for the next sampling event.

4.4 ANALYTICAL METHODS

All groundwater samples were analyzed by the ALS Global (ALS) environmental laboratory in Middletown, Pennsylvania, for VOCs using U.S. EPA SW-846 Test Method 8260D. In addition, the samples were analyzed for 1,4-dioxane using U.S. EPA Test Method 8270E with SIM. These test methods were also used for field quality control (QC) samples – i.e., trip blanks and duplicate samples.

5 2024 GROUNDWATER MONITORING RESULTS

5.1 GROUNDWATER QUALITY STANDARDS FOR SITE-RELATED VOCS

The current (October 2018) MDE groundwater quality standards represent the comparative criteria for all known site-related COCs detected in the offsite groundwater, excluding 1,4-dioxane (which is discussed later on in this section). The applicable water quality standards are provided below.

- 1,1,1-Trichloroethane (TCA) – 200 micrograms per liter (µg/l)
- 1,1-Dichloroethene (DCE) – 7 µg/l
- 1,1-Dichloroethane (DCA) – 2.8 µg/l
- *cis*-1,2-DCE – 70 µg/l
- Trichloroethene (TCE) – 5 µg/l

These values correspond to the standards for Type I and II unconfined and confined aquifers and, with the exception of 1,1-DCA, are consistent with the maximum contaminant levels (MCLs) and secondary MCLs developed by the U.S. EPA under the Safe Drinking Water Act. It is worth noting that there is no Federal MCL for 1,1-DCA. Based on the site hydrogeologic and hydrogeochemical data, the Lower Patapsco aquifer and Patuxent aquifer meet the definition of a Type I aquifer provided in the MDE document *Cleanup Standards for Soil and Groundwater, Interim Final Guidance (Update No. 3)*.

At present, no groundwater quality standard has been promulgated by MDE or U.S. EPA for 1,4-dioxane. Using the current default exposure factors developed by U.S. EPA and a target cancer risk of $1x10^{-5}$, MDE has calculated a risk-based groundwater criterion for 1,4-dioxane of 4.6 µg/l with respect to the plume emanating from the Site. WSP has used this risk-based level for 1,4-dioxane to evaluate the extent of impacted groundwater for the offsite area.

5.2 RESULTS OF SEMI-ANNUAL SAMPLING EVENTS

5.2.1 DATA PRESENTATION

The results for groundwater samples collected in 2024 are summarized in Table 6 and shown on Figure 5. The historical analytical results for all offsite monitoring wells through the 2024 sampling events are summarized in Appendix B. Certified analytical reports provided by the laboratory for each sampling event are included in Appendix A. The following sections discuss the analytical results for each sampling event, with the primary focus on the site-related COCs listed above.

5.2.2 SECOND QUARTER 2024

All monitoring wells screened in the deep zone of the Lower Patapsco aquifer and the Patuxent aquifer were sampled on May 20, 2024, except for MW-31D on Jason Landing Way and MW-46D on the Verizon property north of the Site. Both of these wells were later sampled on June 12, 2024.

A potentiometric surface contour map for the deep zone of the Lower Patapsco aquifer is provided in Figure 6 using the water level data obtained from the onsite and offsite well locations in May 2024. The water level data provided in Figure 6 reflect the hydraulic heads during pumping from deep groundwater recovery well RW-1D on the former Kop-Flex property. The potentiometric surface contours show that the south-southeast groundwater flow direction in the deep zone of the Lower Patapsco aquifer differs from the north and west flow direction in the shallow zone of the aquifer. The south-southeast flow paths are consistent with contour maps generated from data collected during previous well gauging events. As discussed in Section 3.3.2, dissolved constituents (*e.g.*, VOCs) will migrate downward from the shallow to deep zones of the Lower Patapsco aquifer onsite and spread with groundwater flowing through the sandy deposits comprising the deep zone to the south-southeast of the former Kop-Flex facility property.

Overall, the analytical data indicate the continued presence of site-related constituents just over 1 mile hydraulically downgradient (south-southeast) of the former Kop-Flex property in the deep zone of the Lower Patapsco aquifer. Site-related COCs were also detected in the sample obtained from deep well MW-46D on the Verizon property to the north. The total COC concentration in the sample from this well in June 2024 (114.9 µg/l) indicates an increase in concentrations at this location relative to May 2023 when concentrations dipped to historically low levels. The concentrations of 1,1-DCE (65.9), 1,1-DCA (16.4 µg/l), and 1,4-dioxane (30.2 µg/l) in the June 2024 sample all exceeded the comparative criteria in MW-46D (Table 6 and Figure 5).

No COCs were detected in the sample from shallow zone well MW-45 located to the east of the Site. This finding is consistent with historical results and with information discussed above regarding the groundwater flow direction in the shallow zone being to the west resulting in the unlikelihood of COCs migrating offsite to the east in the shallow zone of the Lower Patapsco aquifer.

The sample from well MW-24D had a total concentration of site-related COCs of 1,154 µg/l in May 2024 (Table 6). This total COC concentration was slightly lower than the December 2023 result (1,132 µg/l) but consistent with the July 2023 result (1,190 µg/l). The decrease was due to lower concentrations of 1,4-dioxane (102 µg/l to 78 µg/l), 1,1-DCE (1,130 µg/l to 999 µg/l), and 1,1-DCA (88.1 µg/l to 76.8 µg/l). TCE was detected in well MW-24D in 2022 and again in July 2023 at a concentration exceeding the comparative criterion (5 µg/l). However, TCE was not detected in the December 2023 or May and November 2024 samples from this well. The prior detections of TCE in well MW-24D are believed to be related to the historical migration of VOCs offsite and subsequent pumping-induced transport in response to recent groundwater withdrawals from the onsite deep recovery wells.

Further downgradient, a total COC concentration of 156.3 µg/l (132.9 µg/l in the duplicate sample) was detected in the MW-25D-130 sample, which is greater than the concentrations in the sample from the deeper well MW-25D-192 at this location (33.4 µg/l). The concentrations of 1,1-DCE, 1,1-DCA, and 1,4-dioxane in these two wells were all above their respective comparative groundwater quality criteria. The COC concentrations in the MW-25D-192 sample decreased compared to the December 2023 results.

The majority of the sampling data for the deep, confined Lower Patapsco monitoring wells located further downgradient indicated non-detect to low concentrations of site-related COCs, with detected levels consistent with the 2023 sample results (Figure 5 and Appendix B). The highest concentrations were detected in the sample from well MW-30D-273, where concentrations of 1,1-DCE (30.6 µg/l) and 1,4-dioxane (7.1 µg/l) exceeded their respective groundwater quality criteria. These levels are lower than the results from the December 2023 sampling event. After increasing between June of 2022 and

December of 2023, the 1,1-DCE concentration in MW-28D (13.2 µg/l) appeared to have stabilized at slightly above 10 µg/l based on the May 2024 sample. The concentrations of 1,4-dioxane in samples collected from this well have been below the comparative criterion for all but four times since the startup of the remediation system. At the MW-33D-295 location, the concentration of 1,4-dioxane decreased from levels consistently above the comparative criterion of 4.6 µg/l through the 4th quarter of 2021 to a concentration consistently below that benchmark (3.6 µg/l in the May 2024 sample). In contrast, 1,1-DCE concentrations at this location were consistently below the evaluation criterion of 7 µg/l throughout the sampling history of this well until November 2023, when the concentration (8.9 µg/l) exceeded this comparative level. As compared to December 2023, the concentration of 1,1-DCE decreased slightly in May 2024 at this location to a concentration of 6.7 µg/l.

The sample results for the remaining offsite wells screened in the deep zone of the Lower Patapsco aquifer (MW-29D, MW-31D, MW-32D, MW-33D-235, MW-34D and MW-35D) were non-detect for all site-related COCs.

Consistent with sampling events from previous years, no site-related VOCs or 1,4-dioxane were detected in the samples collected from the monitoring wells (MW-36D and MW-30D-413) screened in the Patuxent aquifer. These results indicate that COCs have not migrated downward through the Arundel Clay confining unit that hydraulically separates the deep sand zone of the Lower Patapsco aquifer and Patuxent aquifer.

5.2.3 FOURTH QUARTER 2024

Groundwater samples and water level measurements were collected from most monitoring wells screened in the deep, confined zone of the Lower Patapsco aquifer and Patuxent aquifer and the one well screened in the shallow zone (MW-45) on November 11, 2024 except as follows:

- Wells MW-25D-132 and MW-31D were sampled on November 26th due to inaccessibility on November 11th, and
- Well MW-25D-190 was sampled on December 16, 2025, because the HydraSleeve™ tether line was discovered to be disconnected from its anchor when accessing the well on November 26th.

As with the second quarter event, the System was in operation and extracting groundwater from the shallow groundwater recovery wells and one of the two deep recovery wells on the former Kop-Flex property.

A potentiometric surface contour map for the deep, confined zone of the Lower Patapsco aquifer is shown in Figure 7 using the water level data obtained from onsite and offsite monitoring wells during November 2024. The potentiometric contours show the hydraulic influence of the groundwater withdrawal from deep recovery well RW-1D extends southward across the William-Scotsman property. Further south, the overall direction of groundwater flow in the deep zone of the Lower Patapsco aquifer is to the south/southeast. The nature of the potentiometric surface is consistent with the contour map generated for the previous (May 2024) monitoring event. The hydraulic head gradients were consistent with, and confirm, the groundwater flow direction in the deep zone of the Lower Patapsco aquifer differs from the direction of flow in the shallow zone of this aquifer, which is generally to the north and west toward Stony Run. As discussed above, dissolved VOCs will migrate downward from the shallow to deep zones within the Lower Patapsco aquifer and, with groundwater flowing through the sandy deposits comprising the deep zone, spread to the south-southeast from the former facility property.

No COCs were detected in the sample from shallow zone well MW-45, confirming that COCs have not migrated eastward from the Site in the shallow zone of the Lower Patapsco aquifer.

The analytical data for wells screened in the deep zone of the Lower Patapsco Aquifer was consistent with previous data, with site-related constituents detected just over 1 mile hydraulically downgradient (south-southeast) of the Site. In addition, site-related COCs were detected in the sample from well MW-46D on the adjoining Verizon property to the north. The total COC concentration in the MW-46D sample (71.9 µg/l) was less than the level present in the June 2024 sample (114.9 µg/l; Table 6). The November 2024 sample concentrations were low compared to historical levels and are indicative of a long-term

reduction in COC concentrations at this location (Appendix B). These reductions are believed to reflect the upgradient expansion of the inflow, or capture, area for the deep onsite groundwater recovery wells.

In the offsite area immediately south of the Site, the sample from monitoring well MW-24D on the Williams-Scotsman property had the highest concentration of site-related COCs (1,181 µg/l). This total COC concentration was slightly higher than that detected in the May 2024 sample (Table 6). The slight increase in concentrations between May and November is consistent with temporal fluctuations observed in this well after the start of remedial pumping activities in 2017. Concentrations of 1,2-dichloroethane and TCE, which have been historically present above the groundwater quality criteria, were not detected in the November 2024 sample due to elevated laboratory reporting limits associated with the sample analysis.

Further downgradient, a total site-related COC concentration of 126.8 µg/l (126.1 µg/l in the duplicate sample) was detected in the MW-25D-130 sample. This concentration is lower than the level present in the May 2024 event (156.3 µg/l and 132.9 µg/l in the duplicate). Lower concentrations of site-related COCs were detected in the sample from the deeper well MW-25D-192 at this location (34.2 µg/l). In both wells in the MW-25D pair, concentrations of 1,1-DCE, 1,1-DCA, and 1,4-dioxane remain above their respective comparative groundwater quality criteria.

The majority of the sampling data for the deep, confined Lower Patapsco aquifer monitoring wells located further downgradient indicated non-detect to low concentrations of site related COCs (Figure 5 and Table 6). The highest concentrations were detected in the sample from the well screened from 263-273 ft bgs at the MW-30D location. The groundwater sample from this well (MW-30D-273) had concentrations of 1,1-DCE (50.7 µg/l) and 1,4-dioxane (11.7 µg/l) above their respective groundwater quality criteria. The concentration of 1,1-DCE is the second-highest value observed in this well to date (Appendix B). WSP believes that this increase may be the result of advective transport of VOC mass downgradient. The concentrations of 1,4-dioxane have also increased in the samples collected from this well dating back to 2022. Lower concentrations were detected in the sample collected from well MW-28D on the western perimeter of the plume where 1,1-DCE (12.2 µg/l) was higher than the comparative criterion and 1,4-dioxane (4.6 µg/l) was right at the criterion.

The remainder of the downgradient wells screened in the deep portion of the Lower Patapsco aquifer had trace to low concentrations of 1,1-DCE, and 1,4-dioxane below the comparative criteria, except for well MW-33D-295 in the southern portion of the Andorick Acres community. At this well location, 1,1-DCE (9.2 µg/l) exceeded the groundwater quality criterion of 7 µg/l for just the second time in the well's sampling history (Figure 5 and Appendix B). Concentrations of this compound have gradually increased from 2022 through 2024. As with the COC concentrations at MW-30D-273, the slight increase in 1,1-DCE may be indicative of temporal variations in VOC mass flux within this aquifer zone.

No site-related VOCs or 1,4-dioxane were detected in samples from wells MW-36D and MW-30D-413 screened in the Patuxent aquifer (Figure 5). These results indicate that COCs have not migrated downward through the Arundel Clay confining unit overlying the Patuxent aquifer.

6 SUMMARY AND CONCLUSIONS

6.1 COC DISTRIBUTION

The analytical results indicate comingled plumes of chlorinated VOCs (primarily 1,1-DCE) and 1,4-dioxane extending from the Site to the south within the deep, confined zone of the Lower Patapsco aquifer, which corresponds to the direction of groundwater flow. The groundwater flow direction in the shallow zone of the Lower Patapsco aquifer is to the north and west, which is opposite that of the deep zone (Figure 3). Consequently, the analytical results from existing shallow monitoring wells and former offsite monitoring wells MW-25 and MW-28 indicate that the occurrence of VOCs and 1,4-dioxane derived from historical releases at the former Kop-Flex facility do not extend to the south of the Site in the shallow zone of the Lower Patapsco aquifer. (The data for shallow wells MW-25 and MW-28, which were abandoned in August 2019, is provided in Appendix B).

The iso-concentration maps shown in Figures 8 and 9 depict the inferred horizontal distribution of 1,1-DCE and 1,4-dioxane within the deep zone of the Lower Patapsco aquifer based on the November 2024 sampling data. The maps also include data for the deep zone monitoring wells in the onsite area to provide a better understanding of the overall extent of the affected groundwater within this portion of the aquifer. Additionally, the contouring data includes historical results from four residential wells, 1245-OCM, 1227-OCM, 7932-AND, and 1054-MINN, to help delimit the eastern and southern boundaries of the plumes. The plume maps were generated by interpolating a logarithmic transform of the concentrations using the Kriging method. Non-detects were entered into the gridding algorithm at the laboratory reporting limit. The lowest concentration contour in each map was set to the Cleanup Criterion for each compound.

Based on the data from well MW-46D, the northern (upgradient) boundaries of the plume areas extend upgradient onto the neighboring Verizon property (Figures 8 and 9). The downgradient offsite wells containing the highest site-related COC concentrations – MW-24D on the William Scotsman property and MW-25D well pair in the northeast corner of the Harmans Woods residential community – are located less than ¼ mile south of the Site. The other deep zone monitoring wells that had 1,1-DCE and/or 1,4-dioxane concentrations above the applicable groundwater comparative criteria were MW-28D, on the cul de sac at the east end of Fairbanks Drive, MW-30D-273, near the intersection of Twin Oaks Road and Old Camp Meade Road, and MW-33D-295, on Thysty Friend Place in the Andorick Acres residential sub-division (Figure 5; Table 6).

The inferred extents of COC exceedances within the Lower Patapsco aquifer deep zone extend greater than 1 mile south-southeast from the southern boundary of the former Kop-Flex property to MW-33D-295 located in the southern portion of the Andorick Acres community (Figures 8 and 9). Given the COC distributions shown in the iso-concentration maps, the impacted groundwater in the deep zone of the Lower Patapsco aquifer south of the MW-25D location consists of largely dilute plumes characterized by relatively low (<100 µg/L) contaminant concentrations. The downgradient plume boundary is based on the non-detectable concentrations of COCs in the samples from wells MW-31D, MW-34D, and MW-35D. The inclusion of historical residential well results to the dataset used to generate the iso-concentration contours provides better interpolation of the downgradient extents of the comingled plumes. The inferred width of the plumes is a little less than ¼-mile at its widest point as measured perpendicular to the groundwater flow direction. Data that helps delimit the width of the plumes is provided by non-detectable concentrations of COCs in well MW-29D to the east, and MW-32D to the west.

As mentioned above, evaluation of the sampling data indicates the permeable sand deposits within the deep confined zone of the Lower Patapsco aquifer represent the primary pathway for the offsite migration of COCs from the former Kop-Flex facility. Figure 10 provides a cross-sectional view of the plume as it spreads through the shallow and deep zones of the Lower Patapsco aquifer onsite and then migrates offsite to the south within the deep zone. Site-related COCs have not been identified, nor are they expected to be present, in the offsite portion of the shallow zone of the Lower Patapsco aquifer to the south of the Site. Hydraulic conditions favoring the downward movement of groundwater within the Lower Patapsco aquifer

combined with the presence of very low permeability units separating the shallow and deeper zones preclude the presence of site-related volatile constituents migrating upward into the soil vapor phase and potentially entering structures at the surface via vapor intrusion.

Evaluation of the historical water level data from the offsite monitoring wells consistently indicates a downward vertical flow component from the Lower Patapsco aquifer to the underlying Patuxent aquifer. However, data from monitoring wells MW-30D-413 and MW-36D screened in the Patuxent aquifer have continued to indicate no detections of site-related COCs. These sample results demonstrate that dissolved constituents comprising the plumes in the deep zone of the Lower Patapsco aquifer have not migrated through the dense, thick clayey deposits of the Arundel Clay confining unit.[7] The downward migration of dissolved VOCs that may be present in the groundwater is significantly retarded by the physical (*i.e.*, geologic) and geochemical properties of the clayey sediments comprising the confining unit.

6.2 COC TRENDS

Concentration versus time plots indicate the presence of long-term trends in the sampling results for wells located south of the Site and within the plume area (Figure 11). The following provides a discussion of the temporal changes in COC concentrations. This discussion focuses on the primary contaminants detected in the deep zone of the Lower Patapsco aquifer – 1,1-DCE and 1,4-dioxane.

At upgradient well MW-46D, both 1,4-dioxane and 1,1-DCE appear to be decreasing since 2020-2021. The recent declines could be due to decreasing residual mass in the deep zone upgradient of the source in response to continued remedial groundwater withdrawals.

At well MW-24D, which is the closest monitoring point to the onsite deep groundwater recovery wells, the 1,1-DCE concentrations appear to be stable since the initiation of remedial pumping. Although 1,4-dioxane concentrations increased in the 4th quarter 2024 sample, this constituent appears to have been on a generally declining trend since the third quarter of 2021 (Figure 11).

Several in-plume wells farther downgradient exhibit long-term reductions in COC concentrations. At MW-25D-130, 1,4-dioxane and 1,1-DCE appear to be gradually decreasing since 2016 (Figure 11). These declines indicate that the downgradient migration of COCs near MW-24D may have been effectively curtailed by groundwater withdrawals from the deep recovery wells. However, in a reversal of a long-term trend, the total concentrations of site-related COCs in the samples from the MW-25D-130 have generally increased between 2022 through 2024 (These increases may be the result of transient contaminant migration from low permeability layers and/or stagnant flow zones. Since 2017, there has been a general decreasing trend in total COC concentrations in the samples from MW-25D-192. More recently minor increases in the 1,1-DCE concentration, are perhaps also due to transient migration of contaminants from lower permeability zones where VOCs are sorbed to clays.

Farther downgradient within the plume at well MW-30D-273, the concentrations of 1,1-DCE and 1,4-dioxane remain elevated in 2024 as compared to long-term trends. The November result of 50.7 µg/l for 1,1-DCE is the second highest concentration detected during the sampling history of the well, preceded only by a concentration of 51 µg/l in the December 2023 sample (Figure 11). At well MW-33D-295 near the southeasternmost (downgradient) extent of the COC plumes, concentrations of 1,1-DCE have been generally stable since November 2021, although a slight increasing trend could also be evident in the data. In addition, 1,4-dioxane concentrations appear to have increased slightly after a decline in concentrations between 2021 and 2023, as well. Additional sampling data is necessary to ascertain whether the recent (2021-2024)

[7] This conclusion is also supported by analytical results for water samples collected from residential wells screened in the Patuxent aquifer, which have also had no detections of site-related COCs.

concentration increases in MW-30D-273 and MW-33D-295 are transient phenomena or represent a definitive change in the nature of the plume in the downgradient area.

At the MW-28D location along the western plume boundary, both 1,1-DCE have been increasing since 2022. However, the recent sample results show little change or a slight decline during 2024 (Figure 11). The lack of a significant long-term trend in COC concentrations along the lateral margins of the plumes suggests that the physical and chemical processes affecting the levels of dissolved contaminants have been at or near a steady-state condition. As with the results from other wells in the downgradient portion of the plumes, these changes could be transient in nature, and determining whether any concentration variations represent a change in the plume will require additional sampling and statistical analysis.

6.3 PLANNED 2025 OFFSITE GROUNDWATER MONITORING ACTIVITIES

WSP believes the existing monitoring well network is sufficient to monitor the distribution of site-related COCs in the offsite areas affected by historical solvent releases at the former Kop-Flex facility property. The collection of water level readings and groundwater quality samples from the 16 deep monitoring wells in the offsite area will continue at a semi-annual frequency during the 2025 calendar year in accordance with the procedures described in Section 4 of this report. The groundwater monitoring activities in 2025 will be conducted during the second and fourth quarters. Based on MDE's review of the updated (April 2024) sampler evaluation report, WSP will continue to use the HydraSleeve for collecting the groundwater samples during the long-term monitoring activities. No sampling is currently planned for any private/residential wells in the offsite area.

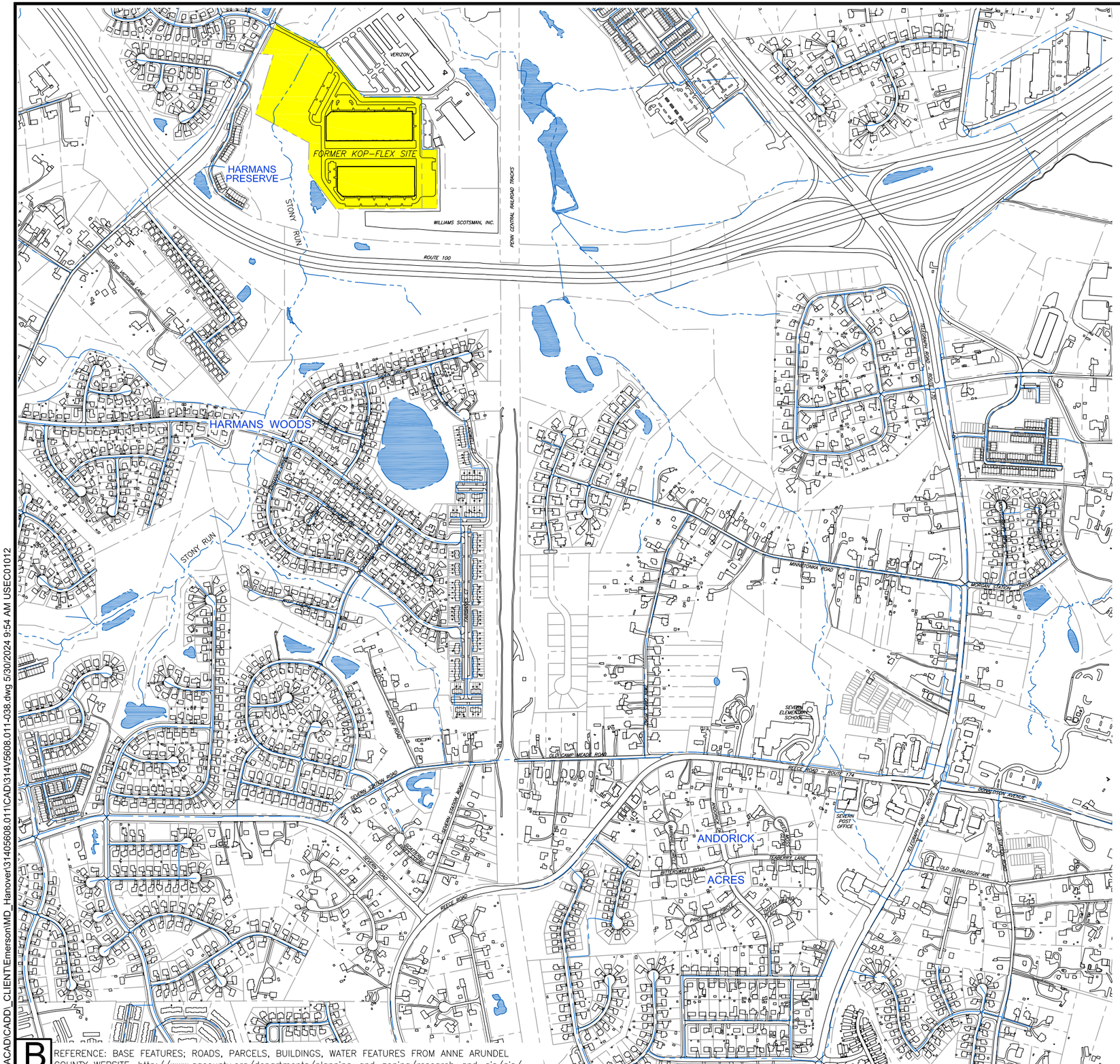
7 ACRONYMS

ALS	ALS Global
bgs	Below Ground Surface
COC	Constituent of Concern
DCA	Dichloroethane
DCE	Dichloroethene
EPA	United States Environmental Protection Agency
MCL	Maximum Contaminant Levels
MDE	Maryland Department of the Environment
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MSL	Mean Sea Level
MW	Monitoring Well
QC	Quality Control
SIM	selected ion monitoring
SOP	Standard Operating Procedure
TCA	Trichloroethane
TCE	Trichloroethene
µg/l	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOCs	Volatile Organic Compounds

8 REFERENCES

- State of Maryland Department of the Environment Cleanup Standards for Soil and Groundwater (October 2018) Interim Final Guidance (Update No. 3).
- United States Geological Survey (USGS) topographic 7.5-minute series quadrangle map for Relay, Maryland (revised 1974).
- WSP USA (September 2015) Groundwater Monitoring Plan, Former Kop-Flex facility, Hanover, Maryland – Voluntary Cleanup Program Site #31.
- GSI Environmental Inc. 2012. GSI Mann-Kendall Toolkit for Constituent Trend Analysis. User's Manual. Version 1.0. November.
- The Interstate Technology & Regulatory Council. 2013. Groundwater Statistics for Monitoring and Compliance, Statistical Tools for the Project Life Cycle. December.
- U.S. Environmental Protection Agency. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. EPA/530/R/09-007. Washington D.C. March.

FIGURES



REFERENCE: BASE FEATURES; ROADS, PARCELS, BUILDINGS, WATER FEATURES FROM ANNE ARUNDEL COUNTY WEBSITE. http://www.aacounty.org/departments/planning-and-zoning/research-and-gis/gis/

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LEGEND

- PROPERTY LINE
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY

N

0 800 1600

SCALE IN FEET

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Drawn By: EGC
Checked: 5/30/2024
Approved:
DWG Name: 31405608.011-038

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

FIGURE 1

LOCATION OF THE FORMER KOP-FLEX SITE
IN HANOVER-SEVERN AREA

WSP USA Inc.
13530 DULLES TECHNOLOGY DR
SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31405608.011\CAD\314V5608.011-038.dwg 5/30/2024 9:54 AM USEC01012

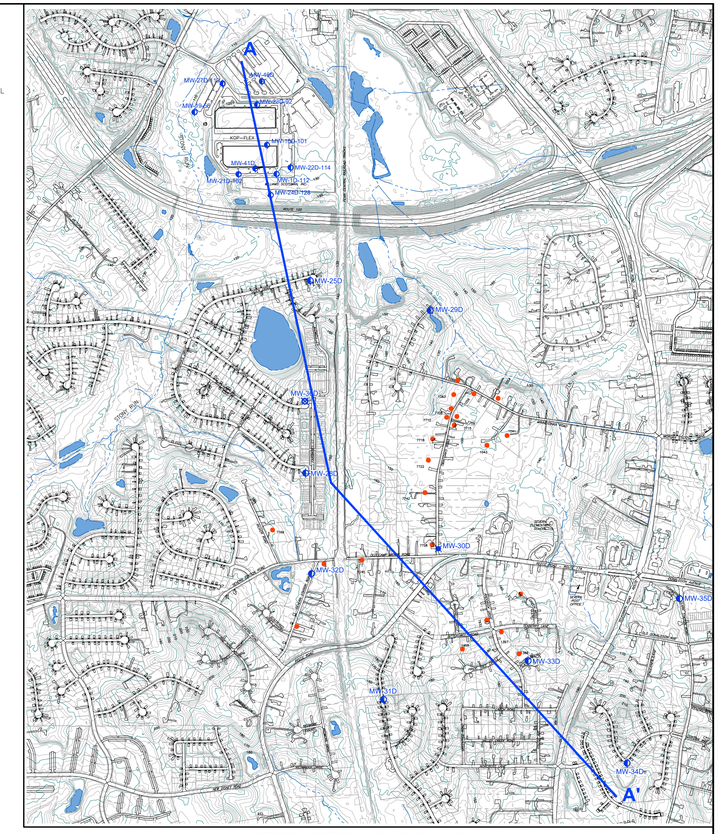
LEGEND

- PROPERTY LINE
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELL
- PATUXENT AQUIFER MONITORING WELL
- FORMER OR EXISTING RESIDENTIAL WELL

CROSS–SECTION LEGEND

- SAND
- INTERLAYERED SAND AND CLAY
- CLAY
- FILL MATERIAL
- PIEZOMETRIC HEAD IN SHALLOW PORTION OF LOWER PATAPSCO AQUIFER (WATER LEVEL DATA RECORDED IN 4TH QUARTER 2018)
- POTENTIOMETRIC HEAD IN DEEP/CONFINED PORTION OF LOWER PATAPSCO AQUIFER
- BOREHOLE
- SCREEN
- DECOMMISSIONED WELL
- END OF BOREHOLE
- CLAIMANT WELL
- BOREHOLE
- SCREEN
- END OF BOREHOLE
- GROUNDWATER FLOW DIRECTION – DEEP/CONFINED PORTON OF LOWER PATAPSCO AQUIFER
- POTENTIOMETRIC SURFACE – DEEP/CONFINED PORTON OF LOWER PATAPSCO AQUIFER
- GROUNDWATER FLOW DIRECTION – SHALLOW/UNCONFINED PORTON OF LOWER PATAPSCO AQUIFER
- GROUNDWATER SURFACE – SHALLOW/UNCONFINED PORTON OF LOWER PATAPSCO AQUIFER

NOTE:
EXISTING GRADE IS BASED ON SURFACE ELEVATION AT THE SECTION LINE NOT THE ELEVATION OF THE TOP OF THE MONITORING WELL OR BOREHOLE.



CROSS SECTION LOCATION MAP
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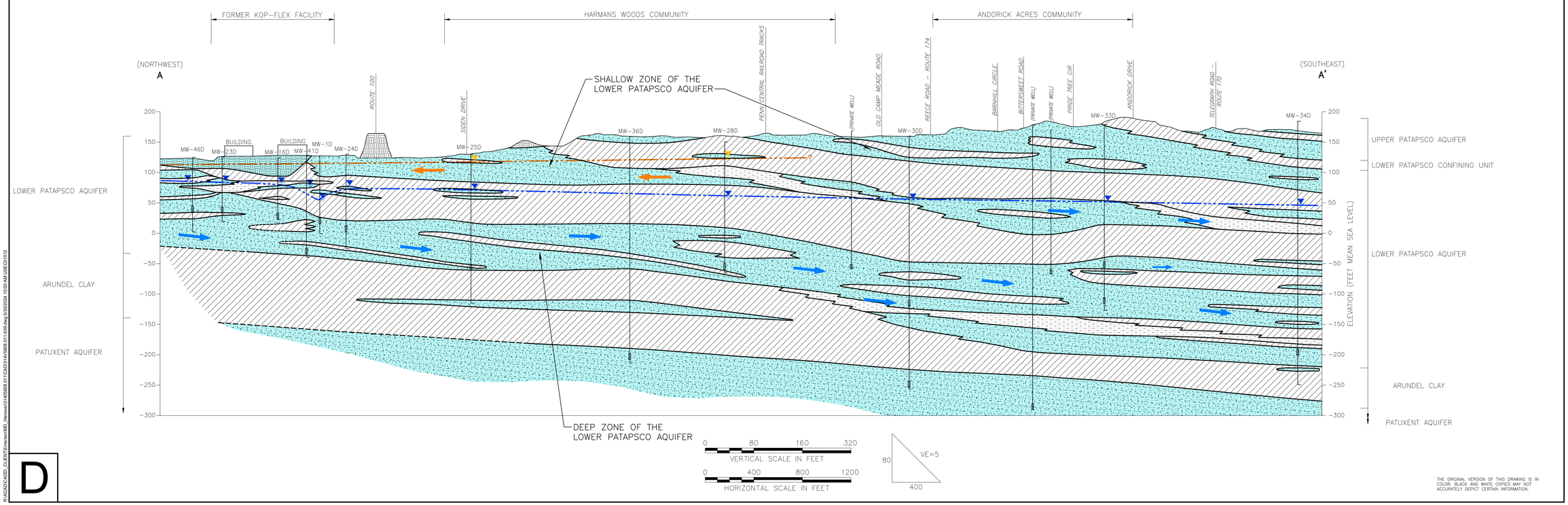

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REVISIONS

REV	DESCRIPTION		
1	Revised:	Chkd:	Appr.:
2	Revised:	Chkd:	Appr.:
3	Revised:	Chkd:	Appr.:

SEAL

DATE

DRAWN BY EGG
CHECKED
APPROVED 5/30/2024

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HYDROGEOLOGIC CROSS–SECTION AND CONCEPTUAL MODEL OF GROUNDWATER FLOW SYSTEM

FORMER KOP–FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

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FIGURE 2

Drawing Number
314V5608.011–039

D

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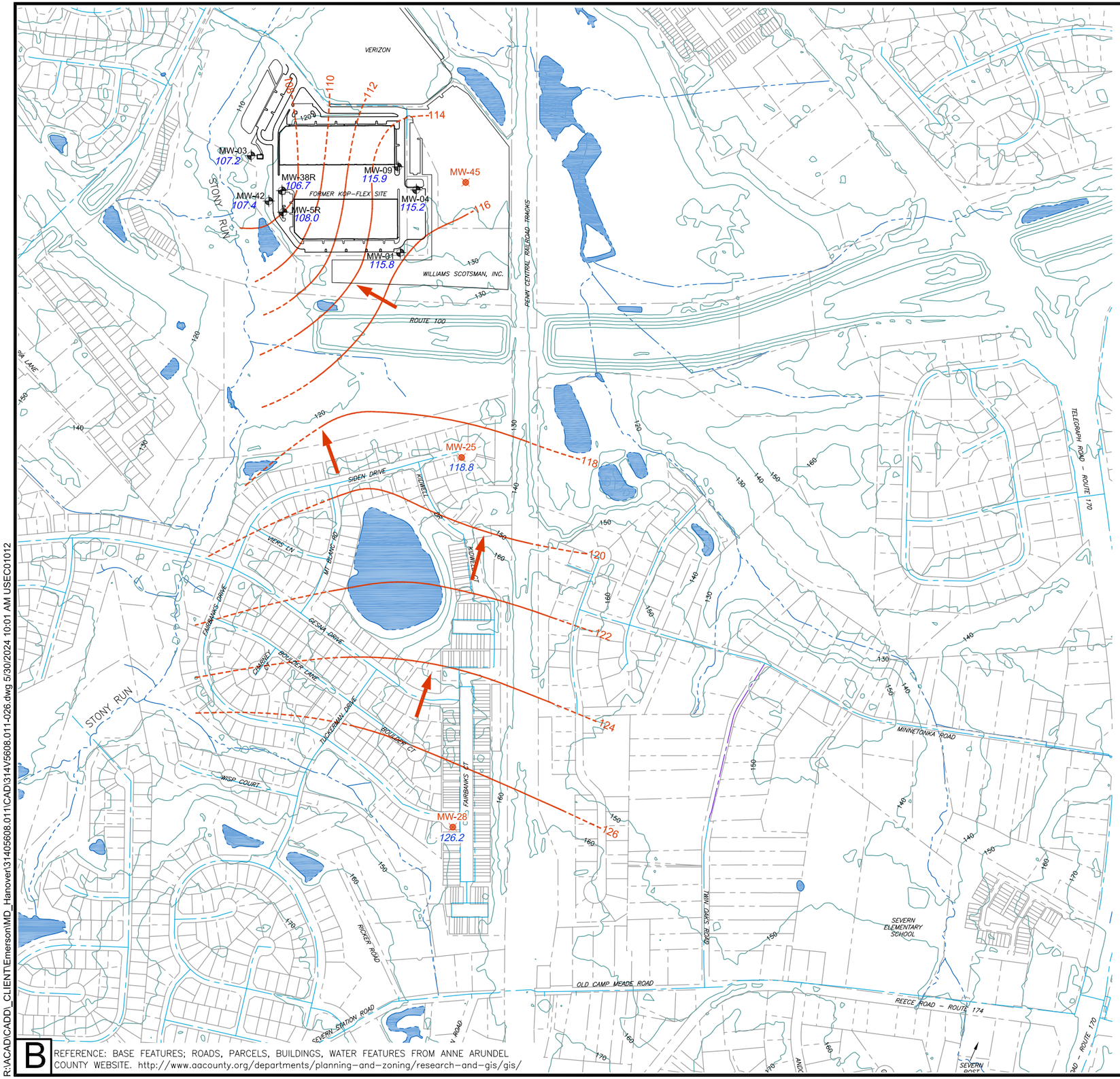

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LEGEND

- PROPERTY LINE
- GROUND SURFACE CONTOUR
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY
- ONSITE SHALLOW MONITORING WELL
- OFFSITE SHALLOW MONITORING WELL
- 118.8 GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER SURFACE CONTOUR, NOVEMBER 2018 (DASHED WHERE INFERRED)

NOTES:

1. FIGURE DEPICTS THE GROUNDWATER SURFACE IN SHALLOW (UNCONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER.
2. GROUNDWATER ELEVATION DATA IN THIS FIGURE WERE COLLECTED IN NOVEMBER 2018.
3. WELLS MW-25 AND MW-28 WERE ABANDONED IN AUGUST 2019.

N

0 600 1200

SCALE IN FEET

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Drawn By: EGC
Checked: 5/30/2024
Approved:
DWG Name: 314V5608.011-026

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
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ST. LOUIS, MISSOURI

FIGURE 3

GROUNDWATER SURFACE FOR THE SHALLOW ZONE OF LOWER PATAPSCO AQUIFER IN THE ONSITE AND OFFSITE AREA

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TEL: +1 703.709.6500

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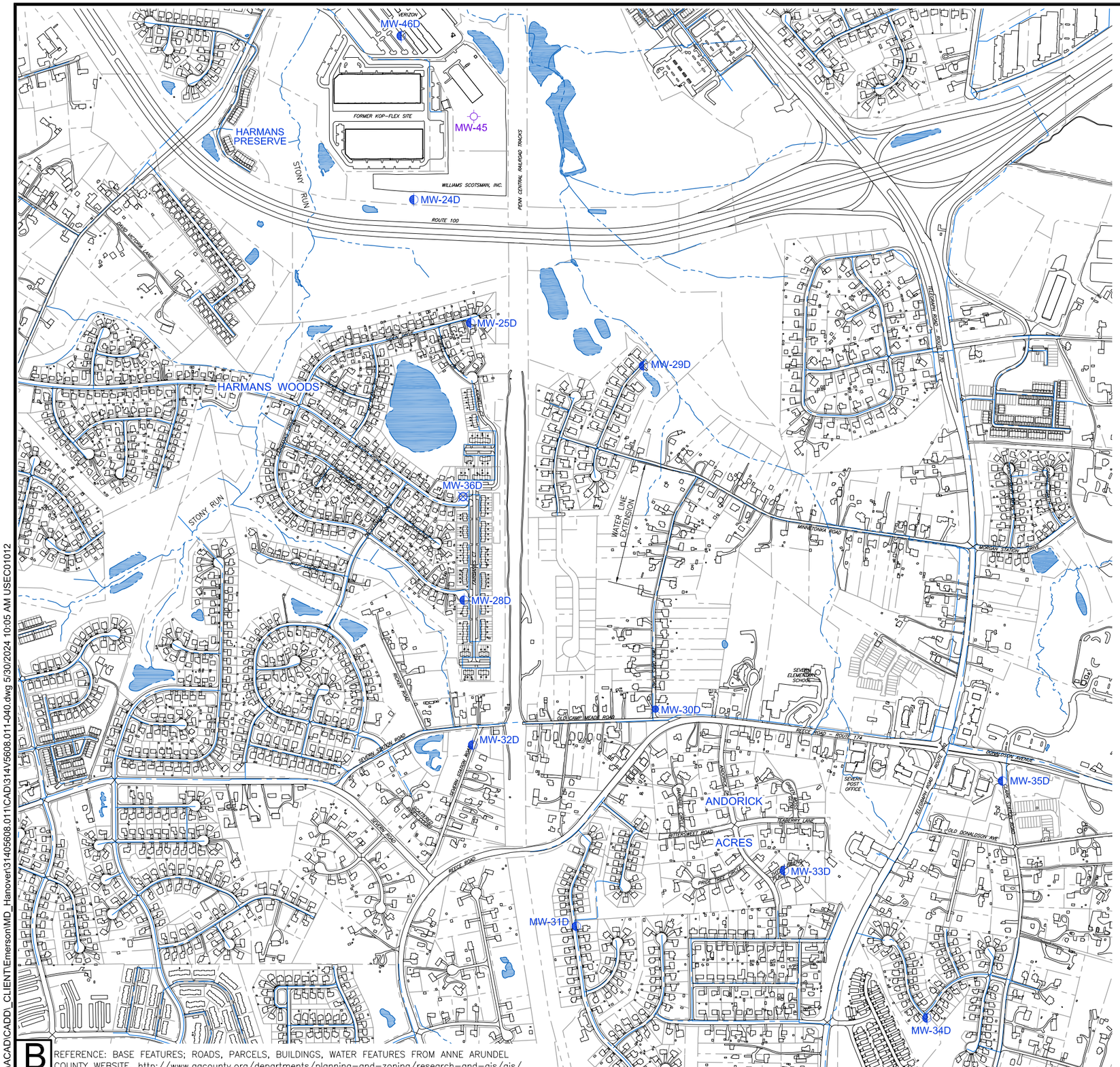

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LEGEND

- PROPERTY LINE
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY
- SHALLOW MONITORING WELL
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELLS
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- PATUXENT AQUIFER MONITORING WELLS

N

0 800 1600

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FIGURE 4

OFFSITE MONITORING WELL LOCATIONS IN LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER

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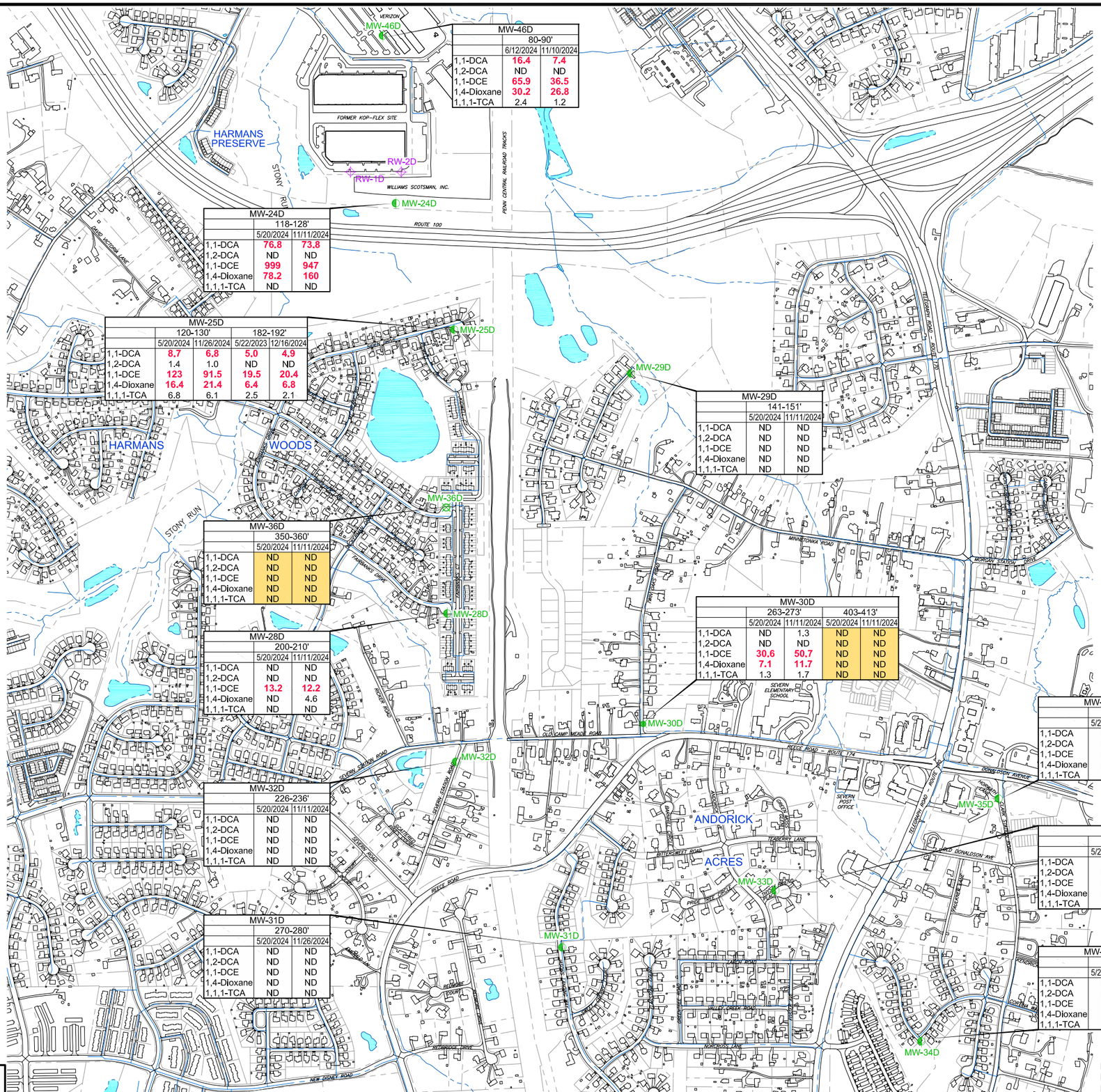

MW-46D	80-90'	
	6/12/2024	11/10/2024
1,1-DCA	16.4	7.4
1,2-DCA	ND	ND
1,1-DCE	65.9	36.5
1,4-Dioxane	30.2	26.8
1,1,1-TCA	2.4	1.2

MW-24D	118-128'	
	5/20/2024	11/11/2024
1,1-DCA	76.8	73.8
1,2-DCA	ND	ND
1,1-DCE	999	947
1,4-Dioxane	78.2	160
1,1,1-TCA	ND	ND

MW-25D	120-130'		182-192'	
	5/20/2024	11/26/2024	5/22/2023	12/16/2024
1,1-DCA	8.7	6.8	5.0	4.9
1,2-DCA	1.4	1.0	ND	ND
1,1-DCE	123	91.5	19.5	20.4
1,4-Dioxane	16.4	21.4	6.4	6.8
1,1,1-TCA	6.8	6.1	2.5	2.1

MW-29D	141-151'	
	5/20/2024	11/11/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

MW-36D	350-360'	
	5/20/2024	11/11/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

MW-28D	200-210'	
	5/20/2024	11/11/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	13.2	12.2
1,4-Dioxane	ND	4.6
1,1,1-TCA	ND	ND

MW-30D	263-273'		403-413'	
	5/20/2024	11/11/2024	5/20/2024	11/11/2024
1,1-DCA	ND	1.3	ND	ND
1,2-DCA	ND	ND	ND	ND
1,1-DCE	30.6	50.7	ND	ND
1,4-Dioxane	7.1	11.7	ND	ND
1,1,1-TCA	1.3	1.7	ND	ND

MW-32D	226-236'	
	5/20/2024	11/11/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

MW-35D	288-298'	
	5/20/2024	11/11/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

MW-33D	225-235'		285-295'	
	5/20/2024	11/26/2024	5/20/2024	11/26/2024
1,1-DCA	ND	ND	ND	ND
1,2-DCA	ND	ND	ND	ND
1,1-DCE	ND	ND	6.7	9.2
1,4-Dioxane	ND	ND	3.6	3.9
1,1,1-TCA	ND	ND	ND	ND

MW-31D	270-280'	
	5/20/2024	11/26/2024
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

MW-34D	375-385'	
	5/22/2023	12/4/2023
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	ND	ND
1,1,1-TCA	ND	ND

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LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL
- PATUXENT AQUIFER MONITORING WELLS
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- RECOVERY WELL

MW-24D		
	118-128'	
	5/20/2024	11/11/2024
1,1-DCA	76.8	73.8
1,2-DCA	ND	ND
1,1-DCE	999	947
1,4-Dioxane	78.2	160
1,1,1-TCA	ND	ND

- WELL IDENTIFICATION
- SCREENED INTERVAL (FT–BGS)
- DATE
- SAMPLE RESULTS IN ppb (RED INDICATES RESULTS ABOVE MDE CLEANUP STANDARDS)
- CONSTITUENTS

DCA	DICHLOROETHANE
DCE	DICHLOROETHENE
TCA	TRICHLOROETHANE
ND	NOT DETECTED
	DATA FOR WELL SCREENED IN PATUXENT AQUIFER

NOTE:
SHALLOW WELLS MW–25 AND MW–28 WERE ABANDONED IN AUGUST 2019.

N

0 800 1600
SCALE IN FEET

REFERENCE:
PARCEL INFORMATION OBTAINED FROM ANNE ARUNDEL COUNTY, DEPARTMENT OF PUBLIC WORKS http://gis–world2.aacounty.org/DPWcounter/countermap.html

Drawn By: EGC
Checked: 2/21/2025
Approved:
DWG Name: 314V5608.011–050

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HANOVER, MARYLAND
PREPARED FOR
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ST. LOUIS, MISSOURI

FIGURE 5

GROUNDWATER MONITORING RESULTS, LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER OFFSITE MONITORING WELLS – 2024

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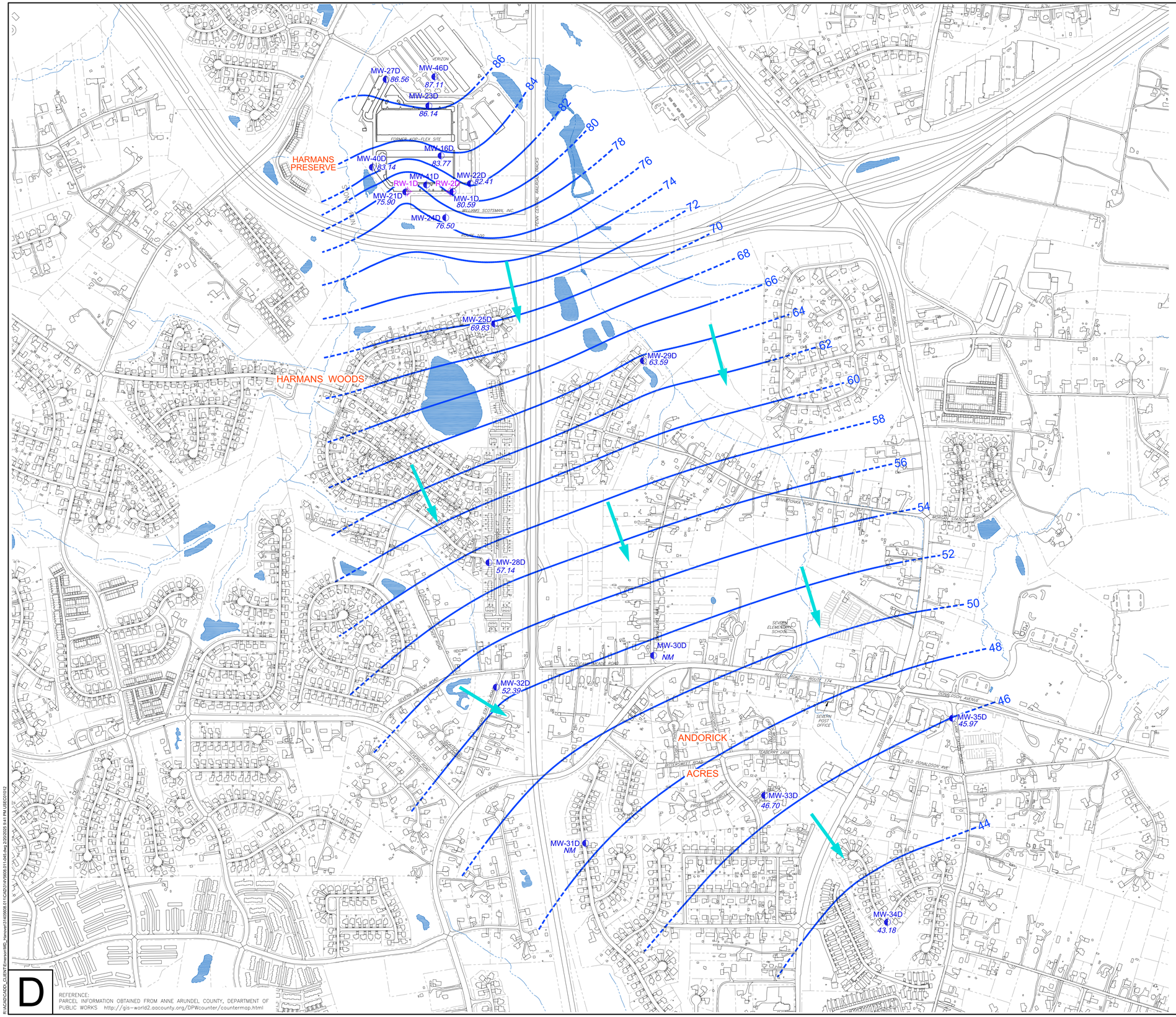

LEGEND

- PROPERTY LINE
- STREAM
- WATER BODY
- MONITORING WELL
- RECOVERY WELL
- 75.90 GROUNDWATER SURFACE ELEVATION (FEET MSL)
- NM NOT MEASURED
- GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
- INFERRED GROUNDWATER FLOW DIRECTION

NOTE:

FIGURE DEPICTS THE POTENTIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER UNDER PUMPING CONDITIONS AT RW-1D ONLY. RECOVERY WELL RW-2D WAS OFF-LINE DURING THE MONITORING EVENT.

D

REFERENCE:
PARCEL INFORMATION OBTAINED FROM ANNE ARUNDEL COUNTY, DEPARTMENT OF PUBLIC WORKS http://gis-world2.aacounty.org/DPWcounter/countermap.html

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1	Revised:	Chkd: Appr.:
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POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER
MAY 2024

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HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

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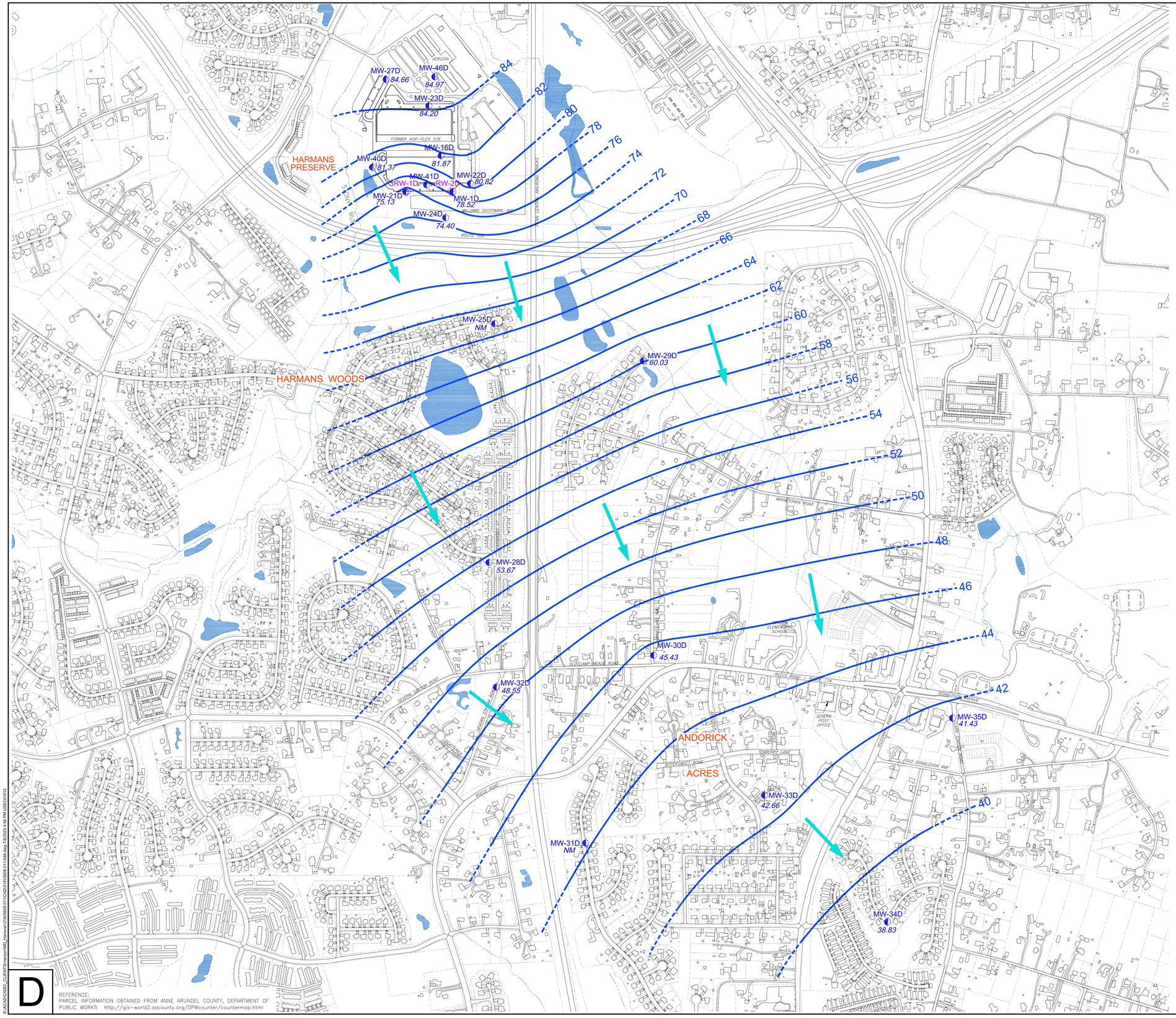
HERNDON, VA 20171
TEL: +1 703.709.6500

FIGURE 6

Drawing Number
314V5608.011-045



LEGEND

- PROPERTY LINE
- STREAM
- WATER BODY
- MONITORING WELL
- RECOVERY WELL
- 53.67 GROUNDWATER SURFACE ELEVATION (FEET MSL)
- NM NOT MEASURED
- GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
- INFERRED GROUNDWATER FLOW DIRECTION

NOTE:

FIGURE DEPICTS THE POTENTIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER UNDER PUMPING CONDITIONS AT RW-1D ONLY. RECOVERY WELL RW-2D WAS OFF-LINE DURING THE MONITORING EVENT.

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REFERENCE:
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1	Revised:	Chkd:	Appr.:
2	Revised:	Chkd:	Appr.:
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POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED ZONE OF THE LOWER PATAPSCO AQUIFER
NOVEMBER 2024
FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
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ST. LOUIS, MISSOURI

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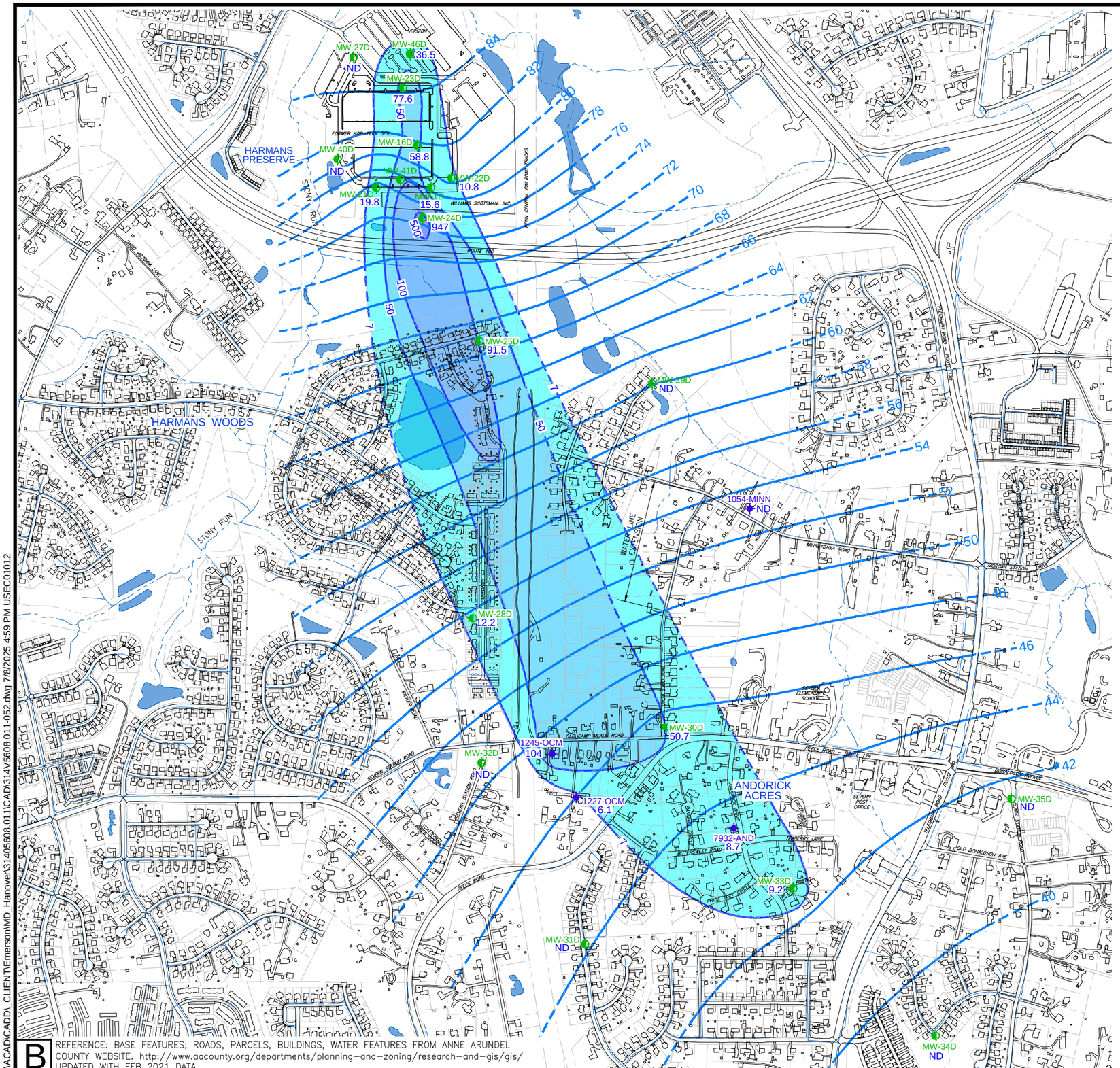
FIGURE 7

Drawing Number
314V5608.011-048



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LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELLS
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- PRIVATE WATER-SUPPLY WELL
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- ND NOT DETECTED
- 58.8 1,1-DCE CONCENTRATION (ppb)
- INFERRED 1,1-DCE ISO-CONCENTRATION CONTOUR (ppb)
- INFERRED 1,1-DCE ISO-CONCENTRATION CONTOUR (ppb) CHARACTERIZED BY HIGHER UNCERTAINTY GIVEN LOCATIONS OF SAMPLING POINTS
- 7 TO <50
- 50 TO <100
- 100 TO <500
- 500 TO <1,000
- ≥1,000

NOTE:
HISTORICAL DATA FROM SEVERAL PRIVATE WATER WELLS SAMPLED BETWEEN 2013 AND 2020 WERE USED TO GENERATE THE ISO-CONCENTRATION CONTOURS.

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Drawn By: EGC
Checked: 2/26/2025
Approved: 4/9/2025
DWG Name: 314V5608.011-052

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FIGURE 8
INFERRED 1,1-DCE DISTRIBUTION IN THE DEEP ZONE OF LOWER PATAPSCO AQUIFER – NOVEMBER 2024

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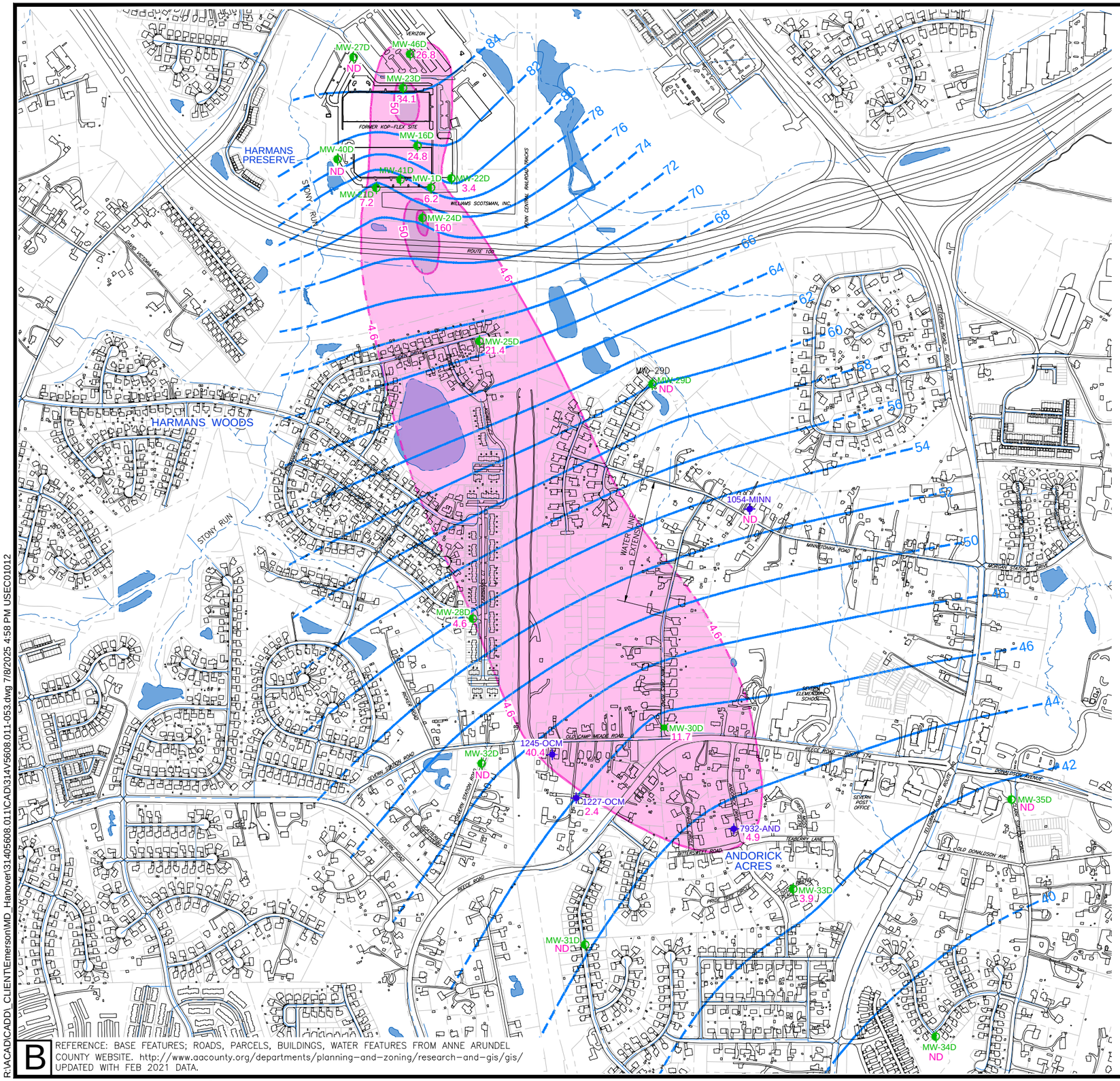

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LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELLS
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- PRIVATE WATER-SUPPLY WELL
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- ND NOT DETECTED
- 24.8 1,4-DIOXANE CONCENTRATION (ppb)
- INFERRED 1,4-DIOXANE ISO-CONCENTRATION CONTOUR (ppb)
- INFERRED 1,4-DIOXANE ISO-CONCENTRATION CONTOUR (ppb) CHARACTERIZED BY HIGHER UNCERTAINTY GIVEN LOCATIONS OF SAMPLING POINTS
- 4.6 TO <50
- 50 TO <100
- ≥100

NOTE:
HISTORICAL DATA FROM SEVERAL PRIVATE WATER WELLS SAMPLED BETWEEN 2013 AND 2020 WERE USED TO GENERATE THE ISO-CONCENTRATION CONTOURS.

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ST. LOUIS, MISSOURI

FIGURE 9
INFERRED 1,4-DIOXANE DISTRIBUTION IN THE DEEP ZONE OF LOWER PATAPSCO AQUIFER – NOVEMBER 2024

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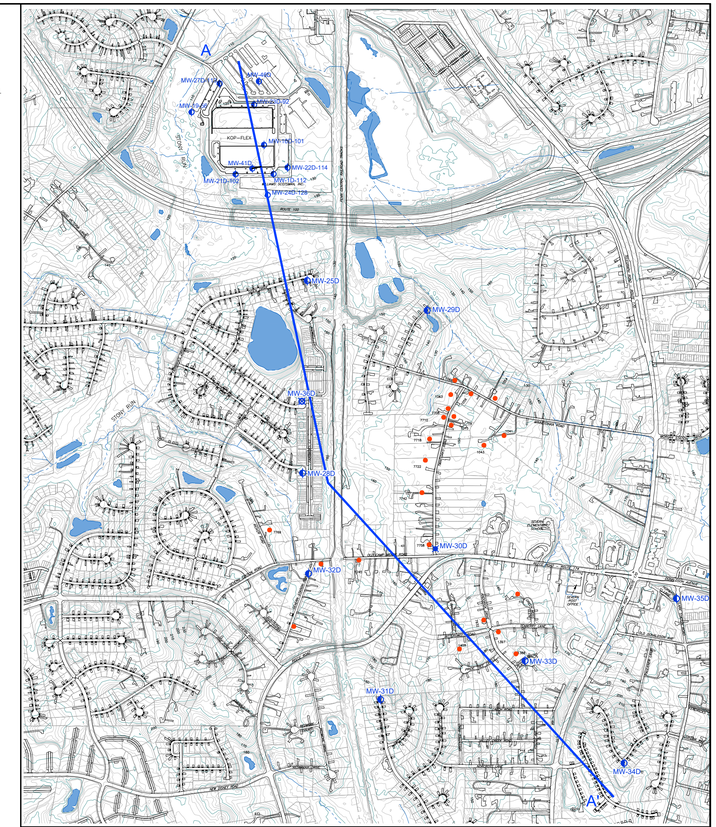
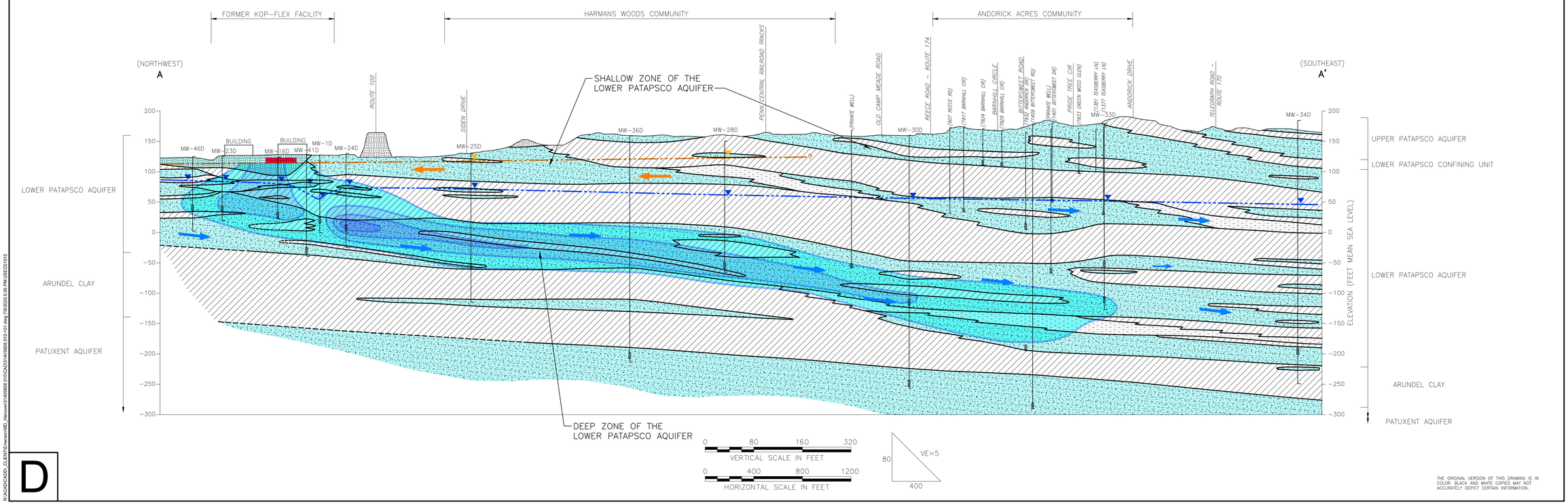
LEGEND
- PROPERTY LINE
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELL
- PATUXENT AQUIFER MONITORING WELL
- FORMER OR EXISTING RESIDENTIAL WELL

CROSS-SECTION LEGEND
- SAND
- INTERLAYERED SAND AND CLAY
- CLAY
- FILL MATERIAL
- PIEZOMETRIC HEAD IN SHALLOW PORTION OF LOWER PATAPSCO AQUIFER (WATER LEVEL DATA RECORDED IN 4TH QUARTER 2018)
- POTENTIOMETRIC HEAD IN DEEP/CONFINED PORTION OF LOWER PATAPSCO AQUIFER
- BOREHOLE
- SCREEN
- DECOMMISSIONED WELL
- END OF BOREHOLE
- GROUNDWATER FLOW DIRECTION – DEEP/CONFINED PORTON OF LOWER PATAPSCO AQUIFER
- POTENTIOMETRIC SURFACE – DEEP/CONFINED PORTON OF LOWER PATAPSCO AQUIFER
- GROUNDWATER FLOW DIRECTION – SHALLOW/UNCONFINED PORTON OF LOWER PATAPSCO AQUIFER
- GROUNDWATER SURFACE – SHALLOW/UNCONFINED PORTON OF LOWER PATAPSCO AQUIFER
- VOC-AFFECTED SOIL
- 2024 1,1-DCE CONCENTRATIONS IN $\mu g/l$:
  - 7 TO <50
  - 50 TO <100
  - 100 TO <500
  - 500 TO <1,000

NOTE:
EXISTING GRADE IS BASED ON SURFACE ELEVATION AT THE SECTION LINE NOT THE ELEVATION OF THE TOP OF THE MONITORING WELL OR BOREHOLE.



CROSS SECTION LOCATION MAP
SCALE: 1"=800'



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APPROVED	4/10/2025

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HYDROGEOLOGIC CROSS-SECTION AND INFERRED COC DISTRIBUTION IN THE SHALLOW AND DEEP ZONES OF THE LOWER PATAPSCO AQUIFER

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

WSP USA Inc.
13530 DULLES TECHNOLOGY DR., SUITE 300
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TEL: +1 703.709.6500

FIGURE 10

Drawing Number
314V5608.010-101

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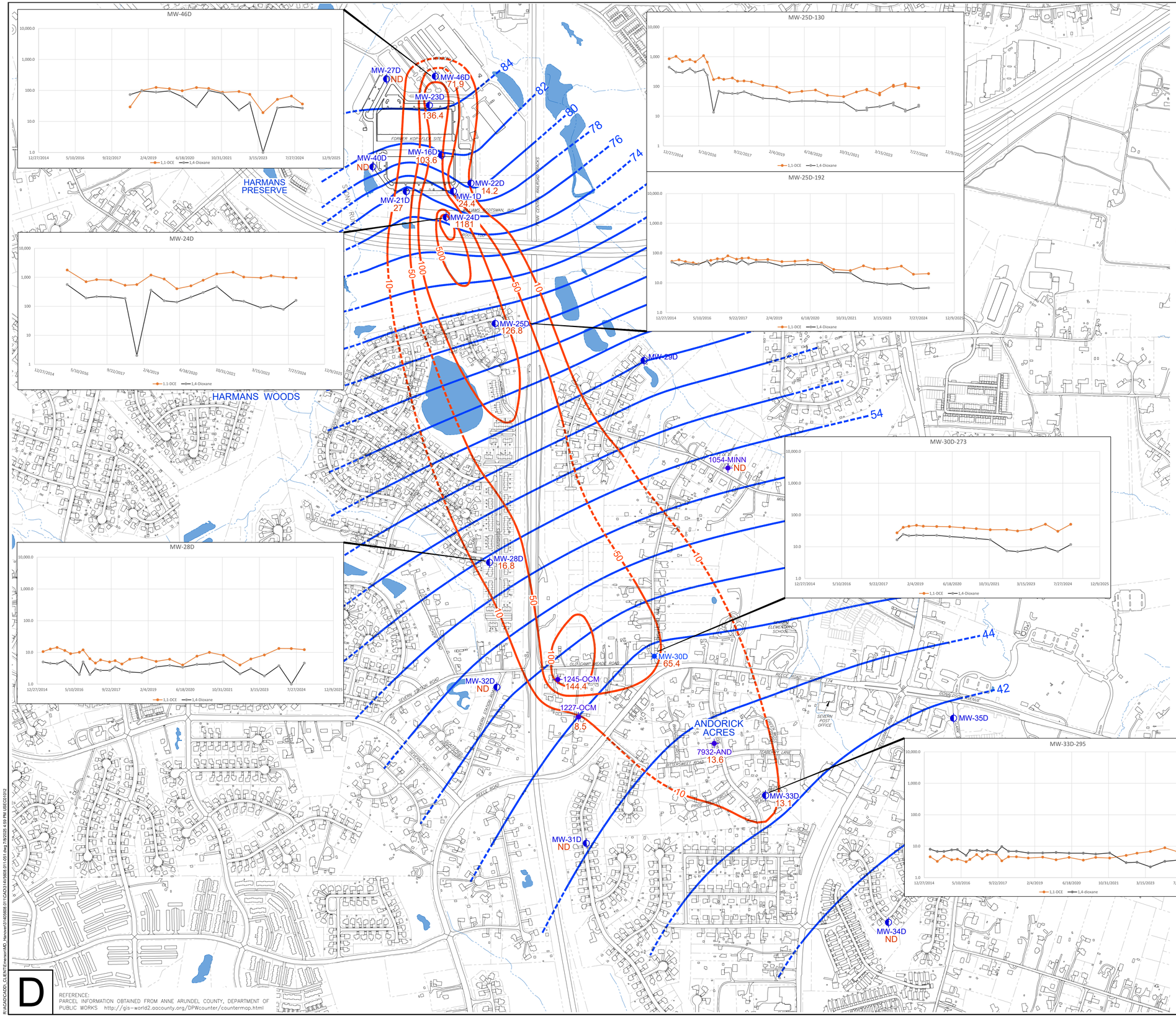

LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- DEEP CONFINED ZONE LOWER PATAPSCO AQUIFER MONITORING WELLS
- DEEP CONFINED ZONE LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- RESIDENTIAL SUPPLY WELL
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- 81.4 TOTAL COC CONCENTRATION (ppb)
- ND NOT DETECTED
- TOTAL COCs= [1,1,1-TCA]+[1,1-DCE]+[1,1-DCA]+[1,2-DCA]+[1,4-DIOXANE]
- 1,1,1-TCA 1,1,1-TRICHLOROETHANE
- 1,1-DCE 1,1-DICHLOROETHENE
- 1,1-DCA 1,1-DICHLOROETHANE
- 1,2-DCA 1,2-DICHLOROETHANE
- [ ] CONCENTRATION (ppb)
- INFERRED TOTAL COC ISO-CONCENTRATION CONTOUR (ppb)
- INFERRED TOTAL COC ISO-CONCENTRATION CONTOUR (ppb) CHARACTERIZED BY HIGHER UNCERTAINTY GIVEN LOCATIONS OF SAMPLING POINTS

NOTE:

THE ISOCONCENTRATION CONTOUR DATA AND GROUNDWATER CONTOUR ELEVATION DATA ARE GENERATED FROM THE RESULTS OF GROUNDWATER SAMPLES COLLECTED IN DECEMBER 2023.

REFERENCE:
PARCEL INFORMATION OBTAINED FROM ANNE ARUNDEL COUNTY, DEPARTMENT OF PUBLIC WORKS http://gis-world2.aacounty.org/DPWcounter/countermap.html

THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK AND WHITE COPIES MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.

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SCALE IN FEET

REVISIONS

REV	DESCRIPTION	
1	Revised:	Chkd: Appr.:
2	Revised:	Chkd: Appr.:
3	Revised:	Chkd: Appr.:

SEAL

DATE

DRAWN BY EGM
CHECKED
APPROVED 9/8/2025

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TOTAL COC DISTRIBUTION IN THE DEEP ZONE OF THE LOWER PATAPSCO AQUIFER WITH CONCENTRATION vs. TIME PLOTS FOR IN-PLUME MONITORING WELLS

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP USA Inc.
13530 DULLES TECHNOLOGY DR., SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

FIGURE 11

Drawing Number
314V5608.011-051

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TABLES

Table 1

Construction Details for Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Well ID	Installation Date	Casing Type	Screen Type	TOC Elevation (feet AMSL)	Total Depth (feet BTOC)	Screen Length (feet)	Screen Interval Depth (ft-bgs)	Screen Interval Elevation (feet AMSL)
Shallow (Unconfined) Lower Patapsco Aquifer								
MW-25 (Abandoned August 2019)	07/30/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	130.6	40	10.0	30.0 - 40.0	100.60 - 90.60
MW-28 (Abandoned August 2019)	07/09/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	150.5	45	10.0	35.0 - 45.0	115.50 - 105.50
MW-45	03/12/17	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	126.7	38	10.0	28.0 - 38.0	98.72 - 88.72
Deep (Confined) Lower Patapsco Aquifer								
MW-24D	06/14/12	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	129.1	155	10.0	145.0 - 155.0	-15.90 - -25.90
MW-25D-130	06/27/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	130.5	130	10.0	120.0 - 130.0	10.50 - 0.50
MW-25D-192	06/25/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	130.5	192	10.0	182.0 - 192.0	-51.50 - -61.50
MW-28D	07/09/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	150.5	210	10.0	200.0 - 210.0	-49.50 - -59.50
MW-29D	03/09/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	131.9	151	10.0	141.0 - 151.0	-9.08 - -19.08
MW-30D-273	04/11/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	153.5	273	10.0	263.0 - 273.0	-109.46 - -119.46
MW-31D	08/04/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	162.5	280	10.0	270.0 - 280.0	-107.50 - -117.50
MW-32D	03/15/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	156.1	266	10.0	256.0 - 266.0	-99.86 - -109.86
MW-33D-236	07/21/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	178.6	236	10.0	226.0 - 236.0	-47.40 - -57.40
MW-33D-295	07/21/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	178.3	295	10.0	285.0 - 295.0	-106.70 - -116.70
MW-34D	04/19/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	183.9	425	10.0	415.0 - 425.0	-231.09 - -241.09
MW-35D	08/16/14	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	177.8	298	10.0	288.0 - 298.0	-110.20 - -120.20
MW-46D	04/26/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	124.77	90	10.0	80.0 - 90.0	44.77 - 34.77
Patuxent Aquifer								
MW-30D-413	04/09/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	153.1	413.00	10.0	403.0 - 413.0	-249.87 - -259.87
MW-36D	03/28/18	2.5" Sch.80 PVC	2.5" PVC, 0.020" slot size	158.7	360.00	10.0	350.0 - 360.0	-191.29 - -201.29

Notes:
a/ AMSL = above mean sea level; BTOC = below top of casing; ft-bgs = feet below ground surface.
PVC = polyvinyl chloride; Sch. = schedule

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

			3/17/2015		6/15/2015		9/21/2015		1/4/2016		3/21/2016	
Well ID	**Aquifer/Zone**	**TOC Elevation**	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	12.84	117.76	12.46	118.14	14.33	116.27	13.48	117.12	12.75	117.85
MW-28S *	Shallow LPA	150.5	25.56	124.94	25.24	125.26	25.88	124.62	25.35	125.15	25.34	125.16
MW-45	Shallow LPA	126.7	NM	-	NM	-	NM	-	NM	-	NM	-
MW-24D	Deep LPA	129.1	50.9	78.20	49.29	79.81	NM	-	NM	-	44.38	84.72
MW-25D-130	Deep LPA	130.5	58.7	71.80	57.59	72.91	58.26	72.24	53.95	76.55	51.01	79.49
MW-25D-192	Deep LPA	130.5	59.99	70.51	56.4	74.10	57.23	73.27	53.05	77.45	50.27	80.23
MW-28D	Deep LPA	150.5	93.06	57.44	89.36	61.14	90.34	60.16	84.62	65.88	80.72	69.78
MW-29D	Deep LPA	131.9	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-273	Deep LPA	153.5	NM	-	NM	-	NM	-	NM	-	NM	-
MW-31D	Deep LPA	162.5	114.02	48.48	108.58	53.92	109.51	52.99	102.44	60.06	98.41	64.09
MW-32D	Deep LPA	156.1	NM	-	NM	-	NM	-	NM	-	NM	-
MW-33D-235	Deep LPA	178.6	131.83	46.77	125.66	52.94	127.11	51.49	119.14	59.46	115.25	63.35
MW-33D-295	Deep LPA	178.3	131.52	46.78	125.42	52.88	126.91	51.39	118.90	59.40	114.96	63.34
MW-34D	Deep LPA	183.9	NM	-	NM	-	NM	-	NM	-	NM	-
MW-35D	Deep LPA	177.8	132.01	45.79	126.28	51.52	127.89	49.91	118.96	58.84	114.34	63.46
MW-46D	Deep LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	NM	-
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	NM	-

Notes:

LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019
a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

			12/7/2016		5/1/2017		8/31/2017		11/14/2017		2/13/2018		5/31/2018	
Well ID	**Aquifer/Zone**	**TOC Elevation**	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	14.61	115.99	14.02	116.58	14.09	116.51	14.6	116.00	14.56	116.04	13.10	117.50
MW-28S *	Shallow LPA	150.5	26.8	123.70	27.4	123.10	27.2	123.30	27.22	123.28	27.48	123.02	27.42	123.08
MW-45	Shallow LPA	126.7	NM	-	13.67	113.05	NM	-	NM	-	NM	-	12.98	113.74
MW-24D	Deep LPA	129.1	46.3	82.80	48.35	80.75	48.35	80.75	51.99	77.11	NM		50.94	78.16
MW-25D-130	Deep LPA	130.5	50.27	80.23	53.80	76.70	61.38	69.12	58.46	72.04	58.31	72.19	58.23	72.27
MW-25D-192	Deep LPA	130.5	52.4	78.10	53.11	77.39	60.36	70.14	58.71	71.79	57.49	73.01	57.40	73.10
MW-28D	Deep LPA	150.5	83.35	67.15	82.72	67.78	94.55	55.95	89.03	61.47	67.37	83.13	88.75	61.75
MW-29D	Deep LPA	131.9	NM	-	NM	-	NM	-	NM	-	NM	-	64.94	66.98
MW-30D-273	Deep LPA	153.5	NM	-	NM	-	NM	-	NM	-	NM	-	98.66	54.88
MW-31D	Deep LPA	162.5	114.20	48.30	100.24	62.26	115.67	46.83	107.21	55.29	106.29	56.21	106.80	55.70
MW-32D	Deep LPA	156.1	NM	-	NM	-	NM	-	NM	-	NM	-	97.90	58.24
MW-33D-235	Deep LPA	178.6	114.2	64.40	117.26	61.34	133.39	45.21	124.55	54.05	123.79	54.81	124.00	54.60
MW-33D-295	Deep LPA	178.3	131.50	46.80	117.03	61.27	133.14	45.16	124.36	53.94	123.60	54.70	123.83	54.47
MW-34D	Deep LPA	183.9	NM	-	NM	-	NM	-	NM	-	NM	-	132.70	51.21
MW-35D	Deep LPA	177.8	131.91	45.89	117.28	60.52	133.55	44.25	125.59	52.21	124.02	53.78	124.27	53.53
MW-46D	Deep LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	NM	-	138.10	15.03
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	NM	-	141.75	16.96

Notes:

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a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	8/23/2018		11/8/2018		2/19/2019		5/22/2019		8/6/2019		11/20/2019	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	NM	-	11.84	118.76	11.75	118.85	NM	-	NM	-	NM	-
MW-28S *	Shallow LPA	150.5	NM	-	24.33	126.17	23.30	127.20	NM	-	NM	-	NM	-
MW-45	Shallow LPA	126.7	NM	-	NM	-	11.98	114.74	11.75	114.97	NM	-	14.55	112.17
MW-24D	Deep LPA	129.1	NM	-	NM	-	48.92	80.18	49.67	79.43	52.37	76.73	51.12	77.98
MW-25D-130	Deep LPA	130.5	59.53	70.97	58.75	71.75	54.96	75.54	56.23	74.27	60.79	69.71	59.94	70.56
MW-25D-192	Deep LPA	130.5	58.69	71.81	57.63	72.87	54.20	76.30	55.45	75.05	60.37	70.13	59.02	71.48
MW-28D	Deep LPA	150.5	90.98	59.52	88.30	62.20	84.78	65.72	86.96	63.54	94.24	56.26	91.37	59.13
MW-29D	Deep LPA	131.9	66.56	65.36	65.03	66.89	60.64	71.28	62.36	69.56	67.20	64.72	67.10	64.82
MW-30D-273	Deep LPA	153.5	100.70	52.84	98.14	55.40	93.10	60.44	95.74	57.80	104.75	48.79	101.12	52.42
MW-31D	Deep LPA	162.5	109.95	52.55	106.27	56.23	102.47	60.03	104.91	57.59	113.35	49.15	110.14	52.36
MW-32D	Deep LPA	156.1	100.65	55.49	98.97	57.17	93.79	62.35	97.02	59.12	99.43	56.71	101.56	54.58
MW-33D-235	Deep LPA	178.6	127.52	51.08	125.14	53.46	119.35	59.25	121.72	56.88	132.76	45.84	127.87	50.73
MW-33D-295	Deep LPA	178.3	127.34	50.96	125.69	52.61	119.10	59.20	NM	NA	131.14	47.16	127.65	50.65
MW-34D	Deep LPA	183.9	136.42	47.49	131.76	52.15	127.40	56.51	129.93	53.98	141.48	42.43	136.62	47.29
MW-35D	Deep LPA	177.8	128.19	49.61	123.64	54.16	119.18	58.62	121.65	56.15	127.51	50.29	129.89	47.91
MW-46D	Deep LPA	124.8	NM	-	NM	-	NM	-	35.47	89.30	38.40	86.37	37.90	86.87
MW-30D-413	Patuxent	153.1	143.75	9.38	140.62	12.51	130.73	22.40	137.25	15.88	145.27	7.86	143.64	9.49
MW-36D	Patuxent	158.7	146.32	12.39	143.85	14.86	134.83	23.88	141.30	17.41	147.65	11.06	146.75	11.96

Notes:

LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019
a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

			2/12/2020		5/14/2020		11/23/2020		5/10/2021		11/15/2021	
Well ID	**Aquifer/Zone**	**TOC Elevation**	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-28S *	Shallow LPA	150.5	NM	-	NM	-	NM	-	NM	-	-	0.00
MW-45	Shallow LPA	126.7	NM	-	NM	-	NM	-	12.69	114.03	12.69	114.03
MW-24D	Deep LPA	129.1	50.10	79.00	48.80	80.30	53.02	76.08	50.01	79.09	49.40	79.70
MW-25D-130	Deep LPA	130.5	55.55	74.95	54.95	75.55	60.50	70.00	56.11	74.39	NM	-
MW-25D-192	Deep LPA	130.5	54.70	75.80	54.23	76.27	59.50	71.00	55.32	75.18	NM	-
MW-28D	Deep LPA	150.5	85.00	65.50	84.36	66.14	92.87	57.63	86.34	64.16	89.34	61.16
MW-29D	Deep LPA	131.9	61.28	70.64	60.61	71.31	67.75	64.17	62.15	69.77	64.82	67.10
MW-30D-273	Deep LPA	153.5	93.29	60.25	92.60	60.94	103.09	50.45	94.95	58.59	99.70	53.84
MW-31D	Deep LPA	162.5	102.73	59.77	NM	-	113.30	49.20	104.32	58.18	108.09	54.41
MW-32D	Deep LPA	156.1	92.35	63.79	94.31	61.83	103.76	52.38	95.58	60.56	99.72	56.42
MW-33D-235	Deep LPA	178.6	119.72	58.88	119.10	59.50	NM	-	121.30	57.30	125.35	53.25
MW-33D-295	Deep LPA	178.3	119.54	58.76	118.84	59.46	130.21	48.09	121.08	57.22	125.15	53.15
MW-34D	Deep LPA	183.9	127.75	56.16	127.01	56.90	139.08	44.83	129.41	54.50	133.82	50.09
MW-35D	Deep LPA	177.8	119.68	58.12	119.06	58.74	129.67	48.13	121.20	56.60	126.19	51.61
MW-46D	Deep LPA	124.8	36.13	88.64	35.73	89.04	37.72	87.05	35.95	88.82	35.95	88.82
MW-30D-413	Patuxent	153.1	128.12	25.01	127.25	25.88	142.22	10.91	134.60	18.53	140.69	12.44
MW-36D	Patuxent	158.7	132.11	26.60	131.08	27.63	145.25	13.46	137.95	20.76	143.70	15.01

Notes:

LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019
a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	6/27/2022		11/20/2022		5/22/2023		12/4/2023		5/19/2024	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	-	-	-	-	NM	-	-	-	-	-
MW-28S *	Shallow LPA	150.5	-	-	-	-	NM	-	-	-	-	-
MW-45	Shallow LPA	126.7	12.91	113.81	13.54	113.18	NM	-	13.54	113.18	12.40	114.32
MW-24D	Deep LPA	129.1	51.06	78.0	53.11	76.0	49.42	79.68	53.83	75.3	52.60	76.5
MW-25D-130	Deep LPA	130.5	60.22	70.3	60.00	70.5	57.68	72.82	61.12	69.4	60.67	69.8
MW-25D-192	Deep LPA	130.5	59.12	71.4	59.10	71.4	56.72	73.78	60.15	70.4	59.60	70.9
MW-28D	Deep LPA	150.5	93.51	57.0	90.81	59.7	89.06	61.44	92.66	57.8	93.36	57.1
MW-29D	Deep LPA	131.9	68.45	63.5	66.70	65.2	65.15	66.77	68.34	63.6	68.31	63.6
MW-30D-273	Deep LPA	153.5	104.25	49.3	100.23	53.3	98.76	54.78	102.50	51.0	NM	-
MW-31D	Deep LPA	162.5	114.2	48.3	109.24	53.3	107.82	54.68	111.54	51.0	NM	-
MW-32D	Deep LPA	156.1	104.98	51.2	100.23	55.9	98.47	57.67	102.17	54.0	103.71	52.4
MW-33D-235	Deep LPA	178.6	132.13	46.5	126.56	52.0	125.61	52.99	129.16	49.4	(a)	-
MW-33D-295	Deep LPA	178.3	131.85	46.5	126.29	52.0	125.39	52.91	128.89	49.4	131.57	46.7
MW-34D	Deep LPA	183.9	141.12	42.8	134.82	49.1	134.32	49.59	137.72	46.2	140.72	43.2
MW-35D	Deep LPA	177.8	132.35	45.5	126.60	51.2	126.53	51.27	129.71	48.1	131.83	46.0
MW-46D	Deep LPA	124.8	37.13	87.64	38.38	86.4	36.26	88.51	38.88	85.9	37.66	87.1
MW-30D-413	Patuxent	153.1	145.4	7.7	141.52	11.6	137.89	15.2	141.29	11.8	139.79	13.3
MW-36D	Patuxent	158.7	148.06	10.7	145.05	13.7	141.29	17.4	144.57	14.1	NM	-

Notes:

LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019
a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 2

Historical Groundwater Elevations (2015 through 2024)
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	6/12/2024		11/11/2024		11/26/2024	
			Depth to Water	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Shallow LPA	130.6	-	-	-	-	-	-
MW-28S *	Shallow LPA	150.5	-	-	-	-	-	-
MW-45	Shallow LPA	126.7	NM	-	13.63	113.09	NM	-
MW-24D	Deep LPA	129.1	NM	-	54.70	74.4	NM	-
MW-25D-130	Deep LPA	130.5	NM	-	NM	-	63.31	67.2
MW-25D-192	Deep LPA	130.5	NM	-	NM	-	62.23	68.3
MW-28D	Deep LPA	150.5	NM	-	96.83	53.7	NM	-
MW-29D	Deep LPA	131.9	69.41	62.5	71.87	60.1	NM	-
MW-30D-273	Deep LPA	153.5	105.30	48.2	108.07	45.5	NM	-
MW-31D	Deep LPA	162.5	115.60	46.9	NM	-	117.69	44.8
MW-32D	Deep LPA	156.1	NM	-	107.55	48.6	NM	-
MW-33D-235	Deep LPA	178.6	133.30	45.3	135.94	42.7	NM	-
MW-33D-295	Deep LPA	178.3	132.96	45.3	135.65	42.7	NM	-
MW-34D	Deep LPA	183.9	NM	-	145.07	38.8	NM	-
MW-35D	Deep LPA	177.8	NM	-	136.37	41.4	NM	-
MW-46D	Deep LPA	124.8	38.32	86.5	39.80	85.0	NM	-
MW-30D-413	Patuxent	153.1	143.58	9.5	148.91	4.2	NM	-
MW-36D	Patuxent	158.7	146.41	12.3	151.72	7.0	NM	-

Notes:

LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019
a/ The field measurement was deemed inaccurate due to an error with the water level indicator

Table 3

Hydrasleeve Deployment Depths - Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland (a)

		Estimated Historical Deployment Depths			New Deployment Depths		
Well ID	**Well Depth (ft bgs)**	**Top of Screen (ft bgs)**	**Deployment Depth (ft bgs)**	**Sample Interval (ft bgs)**	**Top of Screen (ft bgs)**	**Deployment Depth (ft bgs)**	**Sample Interval (ft bgs)**
Unconfined LPA							
MW-45	38	28	34.5	32-34.5	28	33	29.8 - 33.0
Confined LPA							
MW-24D	128.5	118.5	124.5	122-124.5	119	123.5	120.3 - 123.5
MW-25D-130	130	120	127.5	125-127.5	120	126.5	123.3-126.5
MW-25D-190	190	180	187.5	185-187.5	180	188.2 (b)	183.2 - 188.2 (b)
MW-28D	210	200	207.5	205-207.5	200	205	201.8 - 205.0
MW-29D	151	141	149	146-148.5	141	146	142.8 - 146.0
MW-30D-273	273	263	269.5	267-269.5	263	268	264.8 - 268.0
MW-31D	280	270	277.5	275-277.5	270	275	271.8 - 275.0
MW-32D	236	226	236	233-235.5	226	231	227.8 - 231.0
MW-33D-235	235	225	232.5	230-232.5	225	230	226.8 - 230.0
MW-33D-295	295	285	292.5	290-292.5	285	290	286.8 - 290.0
MW-34D	385	375	382	379-381.5	375	380	376.8 - 380.0
MW-35D	298	288	295.5	293-295.5	288	293	289.8 - 293.0
MW-46D	90	80	86.5	84-86.5	80	85	81.8 - 85.0
Patuxent Aquifer							
MW-30D-413	413	403	410	407-409.5	403	408	404.8 - 408
MW-36D	360	350	360	357-359.5	350	355	351.8 - 355.0

a/ ft bgs = feet below ground surface; LPA = Lower Patapsco Aquifer
b/ Deployment depth and sample interval is for the 5-foot long SuperSleeve sampler.

Table 4

Field Hydrogeochemical Measurements - May 2024
Offsite Monitoring Well Locations
Former Kop-Flex Facility Site
Hanover, MD (a)

Well ID	Temperature (°C)	pH	Specific Conductivity (mS/cm)	Turbidity (NTU)
Shallow LPA Zone				
MW-45	20.86	4.87	0.29	0
Deep LPA Zone				
MW-24D	20	5.62	0.104	330
MW-25-130	Not Measured (Sampled in May)			
MW-25-190	Not Measured (Sampled in May)			
MW-28D	19.99	5.94	0.063	990
MW-29D	17.3	6.66	0.161	0
MW-30D-273	15.21	4.95	0.02	16.4
MW-31D	Not Measured (Sampled in June)			
MW-32D	19.17	6.91	0.146	183
MW-33D-235	15.73	5.83	0.039	398
MW-33D-295	16.18	6.05	0.404	144
MW-34D	16.16	6.47	0.302	0
MW-35D	17.13	4.33	0.161	550
Patuxent Aquifer				
MW-30D-413	15.69	5.21	0.024	0
MW-36D	22.14	5.46	0.047	120

a/ °C = degrees Celsius; mS/cm = milliSiemens/centimeter; ORP = oxidation-reduction potential; mV = millivolts; NTU = nephelometric turbidity units; LPA = Lower Patapsco Aquifer.

Table 5

Field Hydrogeochemical Measurements - November and December 2024
Offsite Monitoring Well Locations
Former Kop-Flex Facility Site
Hanover, MD (a)

Well ID	Temperature (°C)	pH	Specific Conductivity (mS/cm)	Turbidity (NTU)
Shallow LPA Zone				
MW-45	17.69	4.92	0.311	> 1000
Deep LPA Zone				
MW-24D	16.97	5.52	0.107	233
MW-25-130	Not Measured			
MW-25-190	11.12	4.78	0.083	44.1
MW-28D	16.20	6.77	0.051	574
MW-29D	18.38	6.76	0.146	462
MW-30D-273	15.18	5.44	0.021	73.2
MW-31D	14.67	4.90	0.117	9.6
MW-32D	18.57	7.15	0.189	329
MW-33D-235	14.72	6.01	0.021	426
MW-33D-295	14.58	6.85	0.032	92.8
MW-34D	14.65	6.45	0.171	713
MW-35D	14.58	4.46	0.169	471
Patuxent Aquifer				
MW-30D-413	15.19	5.61	0.025	726
MW-36D	16.67	6.11	0.018	92.3

a/ °C = degrees Celsius; mS/cm = milliSiemens/centimeter; ORP = oxidation-reduction potential; mV = millivolts; NTU = nephelometric turbidity units; LPA = Lower Patapsco Aquifer.

Table 6

Offsite Monitoring Well Sample Results - Second Quarter and Fourth Quarter 2024
Former Kop-Flex Facility Site
Hanover, Maryland

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID:	SHALLOW ZONE LOWER PATAPSCO AQUIFER		DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER					
			MW-45	**MW-45**	**MW-24D**	**MW-24D**	**MW-25D-130**	**MW-200 (d)**	**MW-25D-130**	**MW-200 (d)**
		Sampling Date:	5/20/24	11/11/24	5/20/24	11/11/24	5/20/24	5/20/24	11/26/24	11/26/24
Methyl t-Butyl Ether	**20**		1.0 U	1.0 U	10.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	**2.8**		1.0 U	1.0 U	**76.8**	**73.8**	**8.7**	**7.2**	**6.8**	**6.7**
1,2-Dichloroethane	**5**		1.0 U	1.0 U	10.0 U	10.0 U	1.4	1.2	1.0	1.1
1,1-Dichloroethene	**7**		1.0 U	1.0 U	**999**	**947**	**123**	**104**	**91.5**	**88.9**
1,4-Dioxane	**4.6 (c)**		1.0 U	1.1 U	**78.2**	**160**	**16.4**	**14.7**	**21.4**	**23.6**
1,1,1-Trichloroethane	**200**		1.0 U	1.0 U	10.0 U	10.0 U	6.8	5.8	6.1	5.8
	Total CVOCs & 1,4-Dioxane		*ND*	*ND*	*1,154*	*1,181*	*156.3*	*132.9*	*126.8*	*126.1*

Table 6

Offsite Monitoring Well Sample Results - Second Quarter and Fourth Quarter 2024
Former Kop-Flex Facility Site
Hanover, Maryland

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER									
	Well ID:	**MW-25D-190 (e)**	**MW-25D-190 (e)**	**MW-28D**	**MW-28D**	**MW-29D**	**MW-29D**	**MW-30D-273**	**MW-30D-273**	**MW-31D**	**MW-31D**
	Sampling Date:	5/20/24	12/16/24	5/20/24	11/11/24	5/20/24	11/11/24	5/20/24	11/11/24	6/12/24	11/26/24
Methyl t-Butyl Ether	**20**	1.2	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	**2.8**	**5.0**	**4.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U
1,2-Dichloroethane	**5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	**7**	**19.5**	**20.4**	**13.2**	**12.2**	1.0 U	1.0 U	**30.6**	**50.7**	1.0 U	1.0 U
1,4-Dioxane	**4.6 (c)**	**6.4**	**6.8**	1.0 U	4.6	1.0 U	1.0 U	**7.1**	**11.7**	1.0 U	1.0 U
1,1,1-Trichloroethane	**200**	2.5	2.1	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.7	1.0 U	1.0 U
	Total CVOCs & 1,4-Dioxane	*33.4*	*34.2*	*13.2*	*16.8*	*ND*	*ND*	*39*	*65.4*	*ND*	*ND*

Table 6

Offsite Monitoring Well Sample Results - Second Quarter and Fourth Quarter 2024
Former Kop-Flex Facility Site
Hanover, Maryland

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID:	MW-32D	MW-32D	MW-33D-235	MW-33D-235	MW-33D-295	MW-33D-295	MW-34D	MW-34D
		Sampling Date:	5/20/24	11/11/24	5/20/24	11/11/24	5/20/24	11/11/24	5/20/24	11/11/24
			DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER							
Methyl t-Butyl Ether	**20**		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	**2.8**		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	**5**		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	**7**		5.0 U	1.0 U	1.0 U	1.0 U	6.7	**9.2**	1.0 U	1.0 U
1,4-Dioxane	**4.6 (c)**		1.0 U	1.1 U	1.0 U	1.0 U	3.6	3.9	1.0 U	1.0 U
1,1,1-Trichloroethane	**200**		5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	Total CVOCs & 1,4-Dioxane		*ND*	*ND*	*ND*	*ND*	*10.3*	*13.1*	*ND*	*ND*

Table 6

Offsite Monitoring Well Sample Results - Second Quarter and Fourth Quarter 2024
Former Kop-Flex Facility Site
Hanover, Maryland

Parameters (a)	Groundwater Quality Standards (µg/L) (b)	Well ID:	DEEP (CONFINED) ZONE LOWER PATAPSCO AQUIFER				PATUXENT AQUIFER			
			MW-35D	MW-35D	MW-46D	MW-46D	MW-30D-413	MW-30D-413	MW-36D	MW-36D
		Sampling Date:	5/20/24	11/11/24	6/12/24	11/10/24	5/20/24	11/11/24	5/20/24	11/11/24
Methyl t-Butyl Ether	**20**		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	**2.8**		1.0 U	1.0 U	**16.4**	**7.4**	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	**5**		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	**7**		1.0 U	1.0 U	**65.9**	**36.5**	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	**4.6 (c)**		1.0 U	1.0 U	**30.2**	**26.8**	1.1 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	**200**		1.0 U	1.0 U	2.4	1.2	1.0 U	1.0 U	1.0 U	1.0 U
	Total CVOCs & 1,4-Dioxane		*ND*	*ND*	*114.9*	*71.9*	*ND*	*ND*	*ND*	*ND*

a/ U = not detected above the method detection limit; CVOC = chlorinated volatile organic compound; NVL = no value listed; ND = non-detect
Bolded values indicate an exceedence of the Groundwater Quality Standards
All sample concentrations in micrograms per liter (µg/l)
b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020:

https://mde.maryland.gov/programs/land/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/document/MDE%20Soil%20and%20Groundwater%20Cleanup%20Standards%2010-2018%20Interim%20Final%20Update%203-2.pdf
c/ Value represents the MDE risk-based action level.
d/ Field duplicate of sample from well MW-25D-130.
e/ Samples collected from monitoring well MW-25D-192 were labeled MW-25D-190 in the field.

APPENDIX

A LABORATORY ANALYTICAL REPORTS

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **WSP USA Inc.**

Project	KOP-Flex Offsite 31405608.011
Workorder	3360622
Report ID	325702 on 5/31/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on May 20, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Elliott Martynkiewicz - WSP USA Inc.
Eric Johnson - WSP USA INC

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3360622001	MW-35D	Ground Water	05/20/2024 08:15	05/20/2024 19:20	CBC	Collected By Client
3360622002	MW-34D	Ground Water	05/20/2024 08:35	05/20/2024 19:20	CBC	Collected By Client
3360622003	MW-33D-295	Ground Water	05/20/2024 09:05	05/20/2024 19:20	CBC	Collected By Client
3360622004	MW-33D-235	Ground Water	05/20/2024 09:15	05/20/2024 19:20	CBC	Collected By Client
3360622005	MW-30D-413	Ground Water	05/20/2024 09:35	05/20/2024 19:20	CBC	Collected By Client
3360622006	MW-30D-273	Ground Water	05/20/2024 09:45	05/20/2024 19:20	CBC	Collected By Client
3360622007	MW-29D	Ground Water	05/20/2024 11:25	05/20/2024 19:20	CBC	Collected By Client
3360622008	MW-45	Ground Water	05/20/2024 12:45	05/20/2024 19:20	CBC	Collected By Client
3360622009	Trip Blank C	Ground Water	05/20/2024 00:00	05/20/2024 19:20	CBC	Collected By Client
3360622010	MW-24D	Ground Water	05/20/2024 13:05	05/20/2024 19:20	CBC	Collected By Client
3360622011	MW-32D	Ground Water	05/20/2024 13:30	05/20/2024 19:20	CBC	Collected By Client
3360622012	MW-28D	Ground Water	05/20/2024 13:50	05/20/2024 19:20	CBC	Collected By Client
3360622013	MW-25D-130	Ground Water	05/20/2024 14:15	05/20/2024 19:20	CBC	Collected By Client
3360622014	MW-25D-190	Ground Water	05/20/2024 14:20	05/20/2024 19:20	CBC	Collected By Client
3360622015	MW-36D	Ground Water	05/20/2024 15:00	05/20/2024 19:20	CBC	Collected By Client
3360622016	Trip Blank-D	Ground Water	05/20/2024 00:00	05/20/2024 19:20	CBC	Collected By Client
3360622017	MW-200	Ground Water	05/20/2024 12:10	05/20/2024 19:20	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

P1 A revised chain of custody was provided by email from Elliott Martynkiewicz of WSP on 05/21/24 to include MW-200. Sample containers were received for this location; however, at receipt, it was not included on the chain of custody. SJS 05/22/24

Sample Notations

Lab ID	Sample ID		
3360622011	MW-32D	**S1**	The reporting limits for GCMS volatile analytes were raised due to the dilution of the sample caused by matrix.

Result Notations

Notation Ref.	
1	Bromomethane was recovered above the 20 percent 8260D criteria in the continuing calibration verification associated with this sample. The % drift was reported at 29.86%. Acceptable limits are +/-20%.
2	Chlorodibromomethane was recovered above the 20 percent 8260D criteria in the continuing calibration verification associated with this sample. The % difference was reported at 20.63%. Acceptable limits are +/-20%.
3	1,1,12-Tetrachloroethane was recovered above the 20 percent 8260D criteria in the continuing calibration verification associated with this sample. The % difference was reported at 20.22%. Acceptable limits are +/-20%.
4	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Carbon Tetrachloride. The % Recovery was reported as 141 and the control limits were 62 to 132.
5	The QC sample type MSD for method SW846 8260D was outside the control limits for the analyte Carbon Tetrachloride. The % Recovery was reported as 134 and the control limits were 62 to 132.
6	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 135 and the control limits were 63 to 128.
7	The QC sample type MS for method SW846 8260D was outside the control limits for the analyte Methyl t-Butyl Ether. The % Recovery was reported as 117 and the control limits were 69 to 115.
8	The QC sample type MS for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as -126 and the control limits were 22 to 75.
9	The QC sample type MSD for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The % Recovery was reported as 139 and the control limits were 22 to 75.
10	The QC sample type MSD for method SW846 8270E SIM was outside the control limits for the analyte 1,4-Dioxane. The RPD was reported as 43.5 and the upper control limit is 30.

Detected Results Summary

Client Sample ID	MW-33D-295	Collected	05/20/2024 09:05
Lab Sample ID	3360622003	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	3.6	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	6.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-30D-273	Collected	05/20/2024 09:45
Lab Sample ID	3360622006	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	7.1	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.3	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	30.6	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-24D	Collected	05/20/2024 13:05
Lab Sample ID	3360622010	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	78.2	ug/L	20.5	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	76.8	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethene	999	ug/L	10.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-28D	Collected	05/20/2024 13:50
Lab Sample ID	3360622012	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
VOLATILE ORGANICS					
1,1-Dichloroethene	13.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-25D-130	Collected	05/20/2024 14:15
Lab Sample ID	3360622013	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	16.4	ug/L	5.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	6.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	8.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	123	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.4	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-25D-190	Collected	05/20/2024 14:20
Lab Sample ID	3360622014	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	6.4	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2.5	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	5.0	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	19.5	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-200	Collected	05/20/2024 12:10
Lab Sample ID	3360622017	Lab Receipt	05/20/2024 19:20

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	14.7	ug/L	6.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	5.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	7.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	104	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.2	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-35D	Collected	05/20/2024 08:15
Lab Sample ID	3360622001	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 07:25	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	87.9%	29 – 112	05/24/2024 07:25	
Fluoranthene-d10	93951-69-0	110%	45 – 130	05/24/2024 07:25	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A

Results

Client Sample ID	MW-35D	Collected	05/20/2024 08:15
Lab Sample ID	3360622001	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:49	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:49	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	05/28/2024 12:49	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	05/28/2024 12:49	
Dibromofluoromethane	1868-53-7	101%	78 – 116	05/28/2024 12:49	
Toluene-d8	2037-26-5	98.8%	76 – 127	05/28/2024 12:49	

Results

Client Sample ID	MW-34D	Collected	05/20/2024 08:35
Lab Sample ID	3360622002	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 07:53	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	96.6%	29 – 112	05/24/2024 07:53	
Fluoranthene-d10	93951-69-0	92.2%	45 – 130	05/24/2024 07:53	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A

Results

Client Sample ID	MW-34D	Collected	05/20/2024 08:35
Lab Sample ID	3360622002	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:09	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:09	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	106%	62 – 133	05/28/2024 13:09	
4-Bromofluorobenzene	460-00-4	93.4%	79 – 114	05/28/2024 13:09	
Dibromofluoromethane	1868-53-7	106%	78 – 116	05/28/2024 13:09	
Toluene-d8	2037-26-5	99.4%	76 – 127	05/28/2024 13:09	

Results

Client Sample ID	MW-33D-295	Collected	05/20/2024 09:05
Lab Sample ID	3360622003	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.6	P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 08:20	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	100%	29 – 112	05/24/2024 08:20	
Fluoranthene-d10	93951-69-0	114%	45 – 130	05/24/2024 08:20	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1-Dichloroethene	6.7	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A

Results

Client Sample ID	MW-33D-295	Collected	05/20/2024 09:05
Lab Sample ID	3360622003	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:29	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:29	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	05/28/2024 13:29	
4-Bromofluorobenzene	460-00-4	93.6%	79 – 114	05/28/2024 13:29	
Dibromofluoromethane	1868-53-7	102%	78 – 116	05/28/2024 13:29	
Toluene-d8	2037-26-5	93%	76 – 127	05/28/2024 13:29	

Results

Client Sample ID	MW-33D-235	Collected	05/20/2024 09:15
Lab Sample ID	3360622004	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 08:47	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	92.8%	29 – 112	05/24/2024 08:47	
Fluoranthene-d10	93951-69-0	96.5%	45 – 130	05/24/2024 08:47	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A

Results

Client Sample ID	MW-33D-235	Collected	05/20/2024 09:15
Lab Sample ID	3360622004	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 13:48	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 13:48	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 – 133	05/28/2024 13:48	
4-Bromofluorobenzene	460-00-4	105%	79 – 114	05/28/2024 13:48	
Dibromofluoromethane	1868-53-7	104%	78 – 116	05/28/2024 13:48	
Toluene-d8	2037-26-5	102%	76 – 127	05/28/2024 13:48	

Results

Client Sample ID	MW-30D-413	Collected	05/20/2024 09:35
Lab Sample ID	3360622005	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1 U	U,P1	ug/L	1.1	SW846 8270E SIM	1	05/24/2024 09:15	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	75.6%	29 – 112	05/24/2024 09:15	
Fluoranthene-d10	93951-69-0	90.8%	45 – 130	05/24/2024 09:15	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A

Results

Client Sample ID	MW-30D-413	Collected	05/20/2024 09:35
Lab Sample ID	3360622005	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:08	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:08	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	05/28/2024 14:08	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	05/28/2024 14:08	
Dibromofluoromethane	1868-53-7	102%	78 – 116	05/28/2024 14:08	
Toluene-d8	2037-26-5	98.5%	76 – 127	05/28/2024 14:08	

Results

Client Sample ID	MW-30D-273	Collected	05/20/2024 09:45
Lab Sample ID	3360622006	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	7.1	P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 09:42	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	94.9%	29 – 112	05/24/2024 09:42	
Fluoranthene-d10	93951-69-0	107%	45 – 130	05/24/2024 09:42	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1,1-Trichloroethane	1.3	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1-Dichloroethene	30.6	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A

Results

Client Sample ID	MW-30D-273	Collected	05/20/2024 09:45
Lab Sample ID	3360622006	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:28	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:28	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	05/28/2024 14:28	
4-Bromofluorobenzene	460-00-4	97.8%	79 – 114	05/28/2024 14:28	
Dibromofluoromethane	1868-53-7	102%	78 – 116	05/28/2024 14:28	
Toluene-d8	2037-26-5	97.7%	76 – 127	05/28/2024 14:28	

Results

Client Sample ID	MW-29D	Collected	05/20/2024 11:25
Lab Sample ID	3360622007	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 10:11	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	79.2%	29 – 112	05/24/2024 10:11	
Fluoranthene-d10	93951-69-0	90.2%	45 – 130	05/24/2024 10:11	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A

Results

Client Sample ID	MW-29D	Collected	05/20/2024 11:25
Lab Sample ID	3360622007	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 14:48	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 14:48	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	108%	62 – 133	05/28/2024 14:48	
4-Bromofluorobenzene	460-00-4	97.9%	79 – 114	05/28/2024 14:48	
Dibromofluoromethane	1868-53-7	106%	78 – 116	05/28/2024 14:48	
Toluene-d8	2037-26-5	102%	76 – 127	05/28/2024 14:48	

Results

Client Sample ID	MW-45	Collected	05/20/2024 12:45
Lab Sample ID	3360622008	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 10:39	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	81.8%	29 – 112	05/24/2024 10:39	
Fluoranthene-d10	93951-69-0	95.2%	45 – 130	05/24/2024 10:39	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A

Results

Client Sample ID	MW-45	Collected	05/20/2024 12:45
Lab Sample ID	3360622008	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:08	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:08	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	05/28/2024 15:08	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	05/28/2024 15:08	
Dibromofluoromethane	1868-53-7	103%	78 – 116	05/28/2024 15:08	
Toluene-d8	2037-26-5	98.8%	76 – 127	05/28/2024 15:08	

Results

Client Sample ID	Trip Blank C	Collected	05/20/2024 00:00
Lab Sample ID	3360622009	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A

Results

Client Sample ID	Trip Blank C	Collected	05/20/2024 00:00
Lab Sample ID	3360622009	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 12:09	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 12:09	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	05/28/2024 12:09	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	05/28/2024 12:09	
Dibromofluoromethane	1868-53-7	102%	78 – 116	05/28/2024 12:09	
Toluene-d8	2037-26-5	101%	76 – 127	05/28/2024 12:09	

Results

Client Sample ID	MW-24D	Collected	05/20/2024 13:05
Lab Sample ID	3360622010	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	78.2	P1	ug/L	20.5	SW846 8270E SIM	20	05/28/2024 23:45	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	98%	29 – 112	05/28/2024 23:45	
2-Methylnapthalene-d10	7297-45-2	80.8%	29 – 112	05/24/2024 11:09	
Fluoranthene-d10	93951-69-0	97.1%	45 – 130	05/28/2024 23:45	
Fluoranthene-d10	93951-69-0	96.6%	45 – 130	05/24/2024 11:09	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1,1-Trichloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1,2,2-Tetrachloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1,2-Trichloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1-Dichloroethane	76.8	P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1-Dichloroethene	999	P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,1-Dichloropropene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2,3-Trichlorobenzene	20.0 U	U,P1	ug/L	20.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2,3-Trichloropropane	20.0 U	U,P1	ug/L	20.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2,4-Trichlorobenzene	20.0 U	U,P1	ug/L	20.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2-Dibromo-3-chloropropane	70.0 U	U,P1	ug/L	70.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2-Dibromoethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2-Dichlorobenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2-Dichloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,2-Dichloropropane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,3-Dichlorobenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,3-Dichloropropane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
1,4-Dichlorobenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
2,2-Dichloropropane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
2-Butanone	100 U	U,P1	ug/L	100	SW846 8260D	10	05/29/2024 15:29	ADB	A
2-Hexanone	50.0 U	U,P1	ug/L	50.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
4-Methyl-2-Pentanone(MIBK)	50.0 U	U,P1	ug/L	50.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Acetone	100 U	U,P1	ug/L	100	SW846 8260D	10	05/29/2024 15:29	ADB	A
Benzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Bromobenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Bromochloromethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Bromodichloromethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Bromoform	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Bromomethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Carbon Tetrachloride	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Chlorobenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Chlorodibromomethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Chloroethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A

Results

Client Sample ID	MW-24D	Collected	05/20/2024 13:05
Lab Sample ID	3360622010	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Chloromethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
cis-1,2-Dichloroethene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
cis-1,3-Dichloropropene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Dibromomethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Dichlorodifluoromethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Diisopropyl ether	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Ethylbenzene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Hexachlorobutadiene	50.0 U	U,P1	ug/L	50.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Methyl t-Butyl Ether	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Methylene Chloride	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
mp-Xylene	20.0 U	U,P1	ug/L	20.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Naphthalene	20.0 U	U,P1	ug/L	20.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
o-Chlorotoluene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
o-Xylene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
p-Chlorotoluene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
p-Isopropyltoluene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Styrene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Tetrachloroethene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Toluene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Total Xylenes	30.0 U	U,P1	ug/L	30.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
trans-1,2-Dichloroethene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
trans-1,3-Dichloropropene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Trichloroethene	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Trichlorofluoromethane	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Vinyl Acetate	50.0 U	U,P1	ug/L	50.0	SW846 8260D	10	05/29/2024 15:29	ADB	A
Vinyl Chloride	10.0 U	U,P1	ug/L	10.0	SW846 8260D	10	05/29/2024 15:29	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	110%	62 – 133	05/29/2024 15:29	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	05/29/2024 15:29	
Dibromofluoromethane	1868-53-7	96%	78 – 116	05/29/2024 15:29	
Toluene-d8	2037-26-5	94.6%	76 – 127	05/29/2024 15:29	

Results

Client Sample ID	MW-32D	Collected	05/20/2024 13:30
Lab Sample ID	3360622011	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1,S1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 11:37	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	89%	29 – 112	05/24/2024 11:37	
Fluoranthene-d10	93951-69-0	101%	45 – 130	05/24/2024 11:37	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1,1-Trichloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1,2,2-Tetrachloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1,2-Trichloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1-Dichloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1-Dichloroethene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,1-Dichloropropene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2,3-Trichlorobenzene	10.0 U	U,P1,S1	ug/L	10.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2,3-Trichloropropane	10.0 U	U,P1,S1	ug/L	10.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2,4-Trichlorobenzene	10.0 U	U,P1,S1	ug/L	10.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2-Dibromo-3-chloropropane	35.0 U	U,P1,S1	ug/L	35.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2-Dibromoethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2-Dichlorobenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2-Dichloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,2-Dichloropropane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,3-Dichlorobenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,3-Dichloropropane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
1,4-Dichlorobenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
2,2-Dichloropropane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
2-Butanone	50.0 U	U,P1,S1	ug/L	50.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
2-Hexanone	25.0 U	U,P1,S1	ug/L	25.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
4-Methyl-2-Pentanone(MIBK)	25.0 U	U,P1,S1	ug/L	25.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Acetone	50.0 U	U,P1,S1	ug/L	50.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Benzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Bromobenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Bromochloromethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Bromodichloromethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Bromoform	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Bromomethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Carbon Tetrachloride	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Chlorobenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Chlorodibromomethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Chloroethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Chloroform	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Chloromethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A

Results

Client Sample ID	MW-32D	Collected	05/20/2024 13:30
Lab Sample ID	3360622011	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
cis-1,3-Dichloropropene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Dibromomethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Dichlorodifluoromethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Diisopropyl ether	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Ethylbenzene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Hexachlorobutadiene	25.0 U	U,P1,S1	ug/L	25.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Methyl t-Butyl Ether	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Methylene Chloride	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
mp-Xylene	10.0 U	U,P1,S1	ug/L	10.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Naphthalene	10.0 U	U,P1,S1	ug/L	10.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
o-Chlorotoluene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
o-Xylene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
p-Chlorotoluene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
p-Isopropyltoluene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Styrene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Tetrachloroethene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Toluene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Total Xylenes	15.0 U	U,P1,S1	ug/L	15.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
trans-1,2-Dichloroethene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
trans-1,3-Dichloropropene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Trichloroethene	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Trichlorofluoromethane	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Vinyl Acetate	25.0 U	U,P1,S1	ug/L	25.0	SW846 8260D	5	05/29/2024 15:08	ADB	A
Vinyl Chloride	5.0 U	U,P1,S1	ug/L	5.0	SW846 8260D	5	05/29/2024 15:08	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	110%	62 – 133	05/29/2024 15:08	
4-Bromofluorobenzene	460-00-4	90%	79 – 114	05/29/2024 15:08	
Dibromofluoromethane	1868-53-7	96%	78 – 116	05/29/2024 15:08	
Toluene-d8	2037-26-5	90.7%	76 – 127	05/29/2024 15:08	

Results

Client Sample ID	MW-28D	Collected	05/20/2024 13:50
Lab Sample ID	3360622012	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 12:07	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	92.8%	29 – 112	05/24/2024 12:07	
Fluoranthene-d10	93951-69-0	96.1%	45 – 130	05/24/2024 12:07	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1-Dichloroethene	13.2	6,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Carbon Tetrachloride	1.0 U	U,4,5,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A

Results

Client Sample ID	MW-28D	Collected	05/20/2024 13:50
Lab Sample ID	3360622012	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Methyl t-Butyl Ether	1.0 U	U,7,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:07	ADB	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:07	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	107%	62 – 133	05/29/2024 14:07	
4-Bromofluorobenzene	460-00-4	98.8%	79 – 114	05/29/2024 14:07	
Dibromofluoromethane	1868-53-7	95.4%	78 – 116	05/29/2024 14:07	
Toluene-d8	2037-26-5	92.9%	76 – 127	05/29/2024 14:07	

Results

Client Sample ID	MW-25D-130	Collected	05/20/2024 14:15
Lab Sample ID	3360622013	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	16.4	P1	ug/L	5.0	SW846 8270E SIM	5	05/29/2024 00:12	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	80.4%	29 – 112	05/29/2024 00:12	
2-Methylnapthalene-d10	7297-45-2	84.8%	29 – 112	05/24/2024 12:36	
Fluoranthene-d10	93951-69-0	106%	45 – 130	05/29/2024 00:12	
Fluoranthene-d10	93951-69-0	103%	45 – 130	05/24/2024 12:36	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1,1-Trichloroethane	6.8	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1-Dichloroethane	8.7	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1-Dichloroethene	123	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2-Dichloroethane	1.4	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A

Results

Client Sample ID	MW-25D-130	Collected	05/20/2024 14:15
Lab Sample ID	3360622013	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:27	ADB	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:27	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	111%	62 – 133	05/29/2024 14:27	
4-Bromofluorobenzene	460-00-4	94.7%	79 – 114	05/29/2024 14:27	
Dibromofluoromethane	1868-53-7	98.5%	78 – 116	05/29/2024 14:27	
Toluene-d8	2037-26-5	95.5%	76 – 127	05/29/2024 14:27	

Results

Client Sample ID	MW-25D-190	Collected	05/20/2024 14:20
Lab Sample ID	3360622014	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	6.4	8,9,10,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 13:05	S7M	G

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	92.1%	29 – 112	05/24/2024 13:05	
Fluoranthene-d10	93951-69-0	102%	45 – 130	05/24/2024 13:05	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,3,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1,1-Trichloroethane	2.5	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1-Dichloroethane	5.0	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1-Dichloroethene	19.5	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Bromomethane	1.0 U	U,1,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Chlorodibromomethane	1.0 U	U,2,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A

Results

Client Sample ID	MW-25D-190	Collected	05/20/2024 14:20
Lab Sample ID	3360622014	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Methyl t-Butyl Ether	1.2	P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/28/2024 15:28	ILY	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/28/2024 15:28	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	108%	62 – 133	05/28/2024 15:28	
4-Bromofluorobenzene	460-00-4	94.8%	79 – 114	05/28/2024 15:28	
Dibromofluoromethane	1868-53-7	105%	78 – 116	05/28/2024 15:28	
Toluene-d8	2037-26-5	97.9%	76 – 127	05/28/2024 15:28	

Results

Client Sample ID	MW-36D	Collected	05/20/2024 15:00
Lab Sample ID	3360622015	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U,P1	ug/L	1.0	SW846 8270E SIM	1	05/24/2024 14:32	S7M	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	83.7%	29 – 112	05/24/2024 14:32	
Fluoranthene-d10	93951-69-0	97.7%	45 – 130	05/24/2024 14:32	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A

Results

Client Sample ID	MW-36D	Collected	05/20/2024 15:00
Lab Sample ID	3360622015	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 14:48	ADB	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 14:48	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	110%	62 – 133	05/29/2024 14:48	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	05/29/2024 14:48	
Dibromofluoromethane	1868-53-7	96%	78 – 116	05/29/2024 14:48	
Toluene-d8	2037-26-5	94.4%	76 – 127	05/29/2024 14:48	

Results

Client Sample ID	Trip Blank-D	Collected	05/20/2024 00:00
Lab Sample ID	3360622016	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1,1-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2-Dichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A

Results

Client Sample ID	Trip Blank-D	Collected	05/20/2024 00:00
Lab Sample ID	3360622016	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 13:47	ADB	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 13:47	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	112%	62 – 133	05/29/2024 13:47	
4-Bromofluorobenzene	460-00-4	95.4%	79 – 114	05/29/2024 13:47	
Dibromofluoromethane	1868-53-7	99.1%	78 – 116	05/29/2024 13:47	
Toluene-d8	2037-26-5	96.5%	76 – 127	05/29/2024 13:47	

Results

Client Sample ID	MW-200	Collected	05/20/2024 12:10
Lab Sample ID	3360622017	Lab Receipt	05/20/2024 19:20

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	14.7	P1	ug/L	6.0	SW846 8270E SIM	5	05/29/2024 00:39	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	76.7%	29 – 112	05/29/2024 00:39	
Fluoranthene-d10	93951-69-0	92.9%	45 – 130	05/29/2024 00:39	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1,1-Trichloroethane	5.8	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1,2,2-Tetrachloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1,2-Trichloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1-Dichloroethane	7.2	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1-Dichloroethene	104	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,1-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2,3-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2,3-Trichloropropane	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2,4-Trichlorobenzene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2-Dibromo-3-chloropropane	7.0 U	U,P1	ug/L	7.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2-Dibromoethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2-Dichloroethane	1.2	P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,3-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,3-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
1,4-Dichlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
2,2-Dichloropropane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
2-Butanone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
2-Hexanone	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Acetone	10.0 U	U,P1	ug/L	10.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Benzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Bromobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Bromochloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Bromodichloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Bromoform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Bromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Carbon Tetrachloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Chlorobenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Chlorodibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Chloroethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Chloroform	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Chloromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A

Results

Client Sample ID	MW-200	Collected	05/20/2024 12:10
Lab Sample ID	3360622017	Lab Receipt	05/20/2024 19:20

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
cis-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Dibromomethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Dichlorodifluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Diisopropyl ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Ethylbenzene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Hexachlorobutadiene	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Methyl t-Butyl Ether	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Methylene Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
mp-Xylene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Naphthalene	2.0 U	U,P1	ug/L	2.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
o-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
o-Xylene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
p-Chlorotoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
p-Isopropyltoluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Styrene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Tetrachloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Toluene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Total Xylenes	3.0 U	U,P1	ug/L	3.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
trans-1,2-Dichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
trans-1,3-Dichloropropene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Trichloroethene	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Trichlorofluoromethane	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Vinyl Acetate	5.0 U	U,P1	ug/L	5.0	SW846 8260D	1	05/29/2024 18:12	ADB	A
Vinyl Chloride	1.0 U	U,P1	ug/L	1.0	SW846 8260D	1	05/29/2024 18:12	ADB	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	109%	62 – 133	05/29/2024 18:12	
4-Bromofluorobenzene	460-00-4	99.7%	79 – 114	05/29/2024 18:12	
Dibromofluoromethane	1868-53-7	96.3%	78 – 116	05/29/2024 18:12	
Toluene-d8	2037-26-5	91.9%	76 – 127	05/29/2024 18:12	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3360622001	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622002	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622003	MW-33D-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622004	MW-33D-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622005	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622006	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622007	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622008	MW-45	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622009	Trip Blank C	SW846 8260D	N/A	
3360622010	MW-24D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622011	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622012	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622013	MW-25D-130	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622014	MW-25D-190	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622015	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3360622016	Trip Blank-D	SW846 8260D	N/A	
3360622017	MW-200	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1207926	Prep Method	SW846 3510C
Date	05/23/2024 09:45	Analysis Method	SW846 8270E SIM
Tech.	MJA		

Associated Samples

3360622017	3360622001	3360622002	3360622003
3360622004	3360622005	3360622006	3360622007
3360622008	3360622010	3360622011	3360622012
3360622013	3360622014	3360622015	

Method Blank 3829428 (MB) Created on 05/22/2024 17:29 For QC Batch 1207926

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.83	1	83.1	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	1	1	102	45 - 130	

Lab Control Standard 3829429 (LCS) Created on 05/22/2024 17:29 For QC Batch 1207926

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.34		1	34.1	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.92	1	92.2	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	1.10	1	110	45 - 130	

Matrix Spike 3829430 (MS) 3360622014 For QC Batch 1207926

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3829431 (MSD) 3360622014 For QC Batch 1207926

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	5.10	6.40	1.10	NC	22 - 75		
1,4-Dioxane	123-91-1	MSD	7.90	6.40	1.10	NC	22 - 75	RPD 43.50* (Max-30)	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	0.73	1.10	69.8	29 - 112	
2-Methylnapthalene-d10	7297-45-2	MSD	0.97	1.10	89.2	29 - 112	
Fluoranthene-d10	93951-69-0	MS	0.53	1.10	50.5	45 - 130	
Fluoranthene-d10	93951-69-0	MSD	1.10	1.10	105	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1209901	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3360622001	3360622002	3360622003	3360622004
3360622005	3360622006	3360622007	3360622008
3360622009	3360622014		

Method Blank 3831042 (MB) Created on 05/28/2024 10:53 For QC Batch 1209901

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	31.30	30	104	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.40	30	98.1	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	31	30	103	78 - 116	
Toluene-d8	2037-26-5	BLK	30.20	30	101	76 - 127	

Lab Control Standard 3831043 (LCS) Created on 05/28/2024 10:53 For QC Batch 1209901

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	22.80		20	114	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	20.70		20	104	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	18.90		20	94.6	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.40		20	96.8	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	18.40		20	91.9	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	18.50		20	92.5	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	19.10		20	95.7	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.10		20	106	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.20		20	101	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.80		20	109	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.60		20	88.1	59 - 133		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dibromoethane	106-93-4	LCS	21		20	105	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.60		20	103	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.30		20	102	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	17.60		20	87.8	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.70		20	104	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.50		20	97.4	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21.40		20	107	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.30		20	106	64 - 129		
2-Butanone	78-93-3	LCS	90.60		100	90.6	50 - 152		
2-Hexanone	591-78-6	LCS	89.40		100	89.4	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	87.90		100	87.9	71 - 146		
Acetone	67-64-1	LCS	92.10		100	92.1	40 - 151		
Benzene	71-43-2	LCS	19.30		20	96.4	80 - 124		
Bromobenzene	108-86-1	LCS	21		20	105	81 - 119		
Bromochloromethane	74-97-5	LCS	21.90		20	109	73 - 117		
Bromodichloromethane	75-27-4	LCS	20.60		20	103	79 - 126		
Bromoform	75-25-2	LCS	20		20	99.8	70 - 123		
Bromomethane	74-83-9	LCS	21.20		20	106	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	21.30		20	106	62 - 132		
Chlorobenzene	108-90-7	LCS	20.60		20	103	85 - 117		
Chlorodibromomethane	124-48-1	LCS	22.10		20	110	77 - 122		
Chloroethane	75-00-3	LCS	14.20		20	71.2	51 - 142		
Chloroform	67-66-3	LCS	20		20	100	78 - 122		
Chloromethane	74-87-3	LCS	9.10		20	45.5	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	18.50		20	92.3	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.70		20	98.7	81 - 121		
Dibromomethane	74-95-3	LCS	19.30		20	96.5	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	7.50		20	37.4	17 - 166		
Diisopropyl ether	108-20-3	LCS	16.80		20	83.9	74 - 131		
Ethylbenzene	100-41-4	LCS	20.70		20	104	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	23.80		20	119	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.20		20	101	69 - 115		
Methylene Chloride	75-09-2	LCS	18.50		20	92.3	76 - 121		
mp-Xylene	108383/106423	LCS	42.10		40	105	79 - 125		
Naphthalene	91-20-3	LCS	19.90		20	99.6	56 - 134		
o-Chlorotoluene	95-49-8	LCS	19.30		20	96.5	78 - 126		
o-Xylene	95-47-6	LCS	20		20	100	79 - 124		
p-Chlorotoluene	106-43-4	LCS	19.30		20	96.6	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	19.90		20	99.6	72 - 123		
Styrene	100-42-5	LCS	20.40		20	102	79 - 123		
Tetrachloroethene	127-18-4	LCS	21		20	105	72 - 124		
Toluene	108-88-3	LCS	19.80		20	99	80 - 125		
Total Xylenes	1330-20-7	LCS	62.10		60	104	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	18.30		20	91.4	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.90		20	105	78 - 126		
Trichloroethene	79-01-6	LCS	19.50		20	97.3	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	19.10		20	95.5	38 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Acetate	108-05-4	LCS	20.10		20	100	58 - 136		
Vinyl Chloride	75-01-4	LCS	12.60		20	62.9	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	32.70	30	109	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31.40	30	105	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	31.20	30	104	78 - 116	
Toluene-d8	2037-26-5	LCS	30.10	30	100	76 - 127	

Matrix Spike 3831044 (MS) 3360622014 For QC Batch 1209901

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3831045 (MSD) 3360622014 For QC Batch 1209901

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.90	0	20	114	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.50	0	20	112	78 - 121	RPD 1.69 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	25	2.50	20	112	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	24	2.50	20	107	66 - 130	RPD 4.06 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	17.80	0	20	89.1	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	17	0	20	85.2	74 - 135	RPD 4.46 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	19	0	20	94.8	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	19.20	0	20	96.1	82 - 126	RPD 1.37 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	23.70	5	20	93.5	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	22.80	5	20	89.3	78 - 124	RPD 3.65 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	38.30	19.50	20	93.7	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	35.80	19.50	20	81.4	63 - 128	RPD 6.65 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	20.90	0	20	104	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	20.10	0	20	101	76 - 126	RPD 3.68 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	18.70	0	20	93.3	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	18.30	0	20	91.3	61 - 126	RPD 2.10 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	18.90	0	20	94.4	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	18.10	0	20	90.5	75 - 132	RPD 4.31 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	19.30	0	20	96.7	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	18.50	0	20	92.6	67 - 123	RPD 4.41 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	16.40	0	20	82.2	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	16.40	0	20	82	59 - 133	RPD 0.31 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20.30	0	20	101	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	20.30	0	20	102	80 - 124	RPD 0.31 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	19.20	0	20	96.2	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	18.30	0	20	91.5	82 - 118	RPD 5.01 (Max-15)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2-Dichloroethane	107-06-2	MS	20.70	0	20	104	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.70	0	20	103	70 - 133	RPD 0.38 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	18.10	0	20	90.5	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	17.70	0	20	88.4	81 - 127	RPD 2.35 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	18.90	0	20	94.6	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	18.10	0	20	90.5	81 - 118	RPD 4.44 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	19	0	20	95.1	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19	0	20	95	82 - 126	RPD 0.06 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.50	0	20	97.6	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	18.60	0	20	93	81 - 116	RPD 4.85 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	19	0	20	95.2	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	18.10	0	20	90.5	64 - 129	RPD 5.13 (Max-18)	
2-Butanone	78-93-3	MS	89.40	0	100	89.4	50 - 152		
2-Butanone	78-93-3	MSD	86.30	0	100	86.3	50 - 152	RPD 3.55 (Max-16)	
2-Hexanone	591-78-6	MS	88.10	0	100	88.1	65 - 154		
2-Hexanone	591-78-6	MSD	87.20	0	100	87.2	65 - 154	RPD 1.02 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	86.50	0	100	86.5	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	87.60	0	100	87.6	71 - 146	RPD 1.27 (Max-16)	
Acetone	67-64-1	MS	82.60	0	100	82.6	40 - 151		
Acetone	67-64-1	MSD	84	0	100	84	40 - 151	RPD 1.70 (Max-40)	
Benzene	71-43-2	MS	20.20	0	20	101	80 - 124		
Benzene	71-43-2	MSD	19.60	0	20	97.8	80 - 124	RPD 3.15 (Max-26)	
Bromobenzene	108-86-1	MS	19.50	0	20	97.4	81 - 119		
Bromobenzene	108-86-1	MSD	18.50	0	20	92.7	81 - 119	RPD 4.90 (Max-17)	
Bromochloromethane	74-97-5	MS	21.90	0	20	110	73 - 117		
Bromochloromethane	74-97-5	MSD	21.50	0	20	107	73 - 117	RPD 1.88 (Max-19)	
Bromodichloromethane	75-27-4	MS	21.20	0	20	106	79 - 126		
Bromodichloromethane	75-27-4	MSD	21	0	20	105	79 - 126	RPD 1.20 (Max-16)	
Bromoform	75-25-2	MS	18.50	0	20	92.5	70 - 123		
Bromoform	75-25-2	MSD	18	0	20	89.9	70 - 123	RPD 2.89 (Max-16)	
Bromomethane	74-83-9	MS	15.60	0	20	78.1	45 - 148		
Bromomethane	74-83-9	MSD	18	0	20	90.2	45 - 148	RPD 14.40 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	24.40	0	20	122	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	23	0	20	115	62 - 132	RPD 6.22 (Max-17)	
Chlorobenzene	108-90-7	MS	20.70	0	20	103	85 - 117		
Chlorobenzene	108-90-7	MSD	20.10	0	20	100	85 - 117	RPD 2.84 (Max-15)	
Chlorodibromomethane	124-48-1	MS	21.70	0	20	109	77 - 122		
Chlorodibromomethane	124-48-1	MSD	21.60	0	20	108	77 - 122	RPD 0.54 (Max-15)	
Chloroethane	75-00-3	MS	18.50	0	20	92.3	51 - 142		
Chloroethane	75-00-3	MSD	17.70	0	20	88.3	51 - 142	RPD 4.44 (Max-24)	
Chloroform	67-66-3	MS	20.90	0	20	105	78 - 122		
Chloroform	67-66-3	MSD	19.90	0	20	99.7	78 - 122	RPD 4.82 (Max-16)	
Chloromethane	74-87-3	MS	14.30	0	20	71.6	38 - 156		
Chloromethane	74-87-3	MSD	13.50	0	20	67.5	38 - 156	RPD 5.89 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21	0	20	105	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	19.40	0	20	97.1	78 - 125	RPD 7.87 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	18.70	0	20	93.6	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	18.70	0	20	93.6	81 - 121	RPD 0.01 (Max-16)	
Dibromomethane	74-95-3	MS	19.40	0	20	96.9	81 - 125		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Dibromomethane	74-95-3	MSD	19.20	0	20	96	81 - 125	RPD 0.92 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	21.30	0	20	107	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	19.70	0	20	98.6	17 - 166	RPD 7.82 (Max-24)	
Diisopropyl ether	108-20-3	MS	17.10	0	20	85.4	74 - 131		
Diisopropyl ether	108-20-3	MSD	16.90	0	20	84.4	74 - 131	RPD 1.18 (Max-15)	
Ethylbenzene	100-41-4	MS	21.20	0	20	106	80 - 124		
Ethylbenzene	100-41-4	MSD	20.50	0	20	103	80 - 124	RPD 3.02 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	20.40	0	20	102	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	20.10	0	20	100	55 - 128	RPD 1.62 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	21.10	1.20	20	99.5	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	21	1.20	20	99.2	69 - 115	RPD 0.27 (Max-20)	
Methylene Chloride	75-09-2	MS	19.20	0	20	96.1	76 - 121		
Methylene Chloride	75-09-2	MSD	18.80	0	20	93.8	76 - 121	RPD 2.50 (Max-17)	
mp-Xylene	108383/106423	MS	42.70	0	40	107	79 - 125		
mp-Xylene	108383/106423	MSD	42	0	40	105	79 - 125	RPD 1.63 (Max-21)	
Naphthalene	91-20-3	MS	19.50	0	20	97.7	56 - 134		
Naphthalene	91-20-3	MSD	18.20	0	20	91	56 - 134	RPD 7.17 (Max-40)	
o-Chlorotoluene	95-49-8	MS	18.80	0	20	94.1	78 - 126		
o-Chlorotoluene	95-49-8	MSD	17.70	0	20	88.5	78 - 126	RPD 6.15 (Max-17)	
o-Xylene	95-47-6	MS	20.10	0	20	100	79 - 124		
o-Xylene	95-47-6	MSD	19.70	0	20	98.7	79 - 124	RPD 1.61 (Max-19)	
p-Chlorotoluene	106-43-4	MS	18	0	20	90.2	78 - 125		
p-Chlorotoluene	106-43-4	MSD	17	0	20	85.2	78 - 125	RPD 5.62 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	18.90	0	20	94.5	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	17.80	0	20	88.8	72 - 123	RPD 6.24 (Max-17)	
Styrene	100-42-5	MS	19.10	0	20	95.6	79 - 123		
Styrene	100-42-5	MSD	18.30	0	20	91.7	79 - 123	RPD 4.23 (Max-16)	
Tetrachloroethene	127-18-4	MS	20.90	0	20	104	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.80	0	20	99	72 - 124	RPD 5.38 (Max-38)	
Toluene	108-88-3	MS	20.10	0	20	100	80 - 125		
Toluene	108-88-3	MSD	19.60	0	20	98.2	80 - 125	RPD 2.15 (Max-20)	
Total Xylenes	1330-20-7	MS	62.70	0	60	105	79 - 125		
Total Xylenes	1330-20-7	MSD	61.70	0	60	103	79 - 125	RPD 1.62 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	19.40	0	20	96.9	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	18.30	0	20	91.6	71 - 122	RPD 5.56 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	19.70	0	20	98.5	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	19.60	0	20	98.1	78 - 126	RPD 0.46 (Max-18)	
Trichloroethene	79-01-6	MS	20.60	0	20	103	77 - 124		
Trichloroethene	79-01-6	MSD	20.10	0	20	100	77 - 124	RPD 2.62 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	23.20	0	20	116	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	21.80	0	20	109	38 - 123	RPD 6.32 (Max-23)	
Vinyl Acetate	108-05-4	MS	17.10	0	20	85.7	58 - 136		
Vinyl Acetate	108-05-4	MSD	17.20	0	20	86.2	58 - 136	RPD 0.50 (Max-17)	
Vinyl Chloride	75-01-4	MS	19	0	20	95.1	27 - 138		
Vinyl Chloride	75-01-4	MSD	17.10	0	20	85.7	27 - 138	RPD 10.30 (Max-40)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.80	30	106	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	32.60	30	109	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	28.30	30	94.2	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.70	30	99.2	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.50	30	102	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	31.50	30	105	78 - 116	
Toluene-d8	2037-26-5	MS	28.10	30	93.8	76 - 127	
Toluene-d8	2037-26-5	MSD	30.50	30	102	76 - 127	

QC Batch

QC Batch	1210272	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3360622016	3360622017	3360622010	3360622011
3360622012	3360622013	3360622015	

Lab Control Standard 3831816 (LCS) Created on 05/29/2024 12:49 For QC Batch 1210272

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	19.70		20	98.6	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.80		20	109	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.70		20	108	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	19.60		20	97.9	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	22		20	110	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	24.80		20	124	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21.60		20	108	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	18		20	89.8	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.70		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	18		20	90.2	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	16		20	80.1	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.40		20	96.8	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	19.10		20	95.7	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	21.60		20	108	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	21.70		20	109	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	18.90		20	94.6	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	19.40		20	97	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	19.10		20	95.3	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	22		20	110	64 - 129		
2-Butanone	78-93-3	LCS	103		100	103	50 - 152		
2-Hexanone	591-78-6	LCS	109		100	109	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	108		100	108	71 - 146		
Acetone	67-64-1	LCS	109		100	109	40 - 151		
Benzene	71-43-2	LCS	21.20		20	106	80 - 124		
Bromobenzene	108-86-1	LCS	19.70		20	98.5	81 - 119		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromochloromethane	74-97-5	LCS	20.90		20	105	73 - 117		
Bromodichloromethane	75-27-4	LCS	22.10		20	110	79 - 126		
Bromoform	75-25-2	LCS	17.40		20	87	70 - 123		
Bromomethane	74-83-9	LCS	21.90		20	110	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	22.60		20	113	62 - 132		
Chlorobenzene	108-90-7	LCS	18.60		20	92.9	85 - 117		
Chlorodibromomethane	124-48-1	LCS	16.70		20	83.4	77 - 122		
Chloroethane	75-00-3	LCS	20.10		20	101	51 - 142		
Chloroform	67-66-3	LCS	21.90		20	109	78 - 122		
Chloromethane	74-87-3	LCS	19.70		20	98.3	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.90		20	110	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20		20	99.8	81 - 121		
Dibromomethane	74-95-3	LCS	21.20		20	106	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	17.50		20	87.4	17 - 166		
Diisopropyl ether	108-20-3	LCS	23.30		20	117	74 - 131		
Ethylbenzene	100-41-4	LCS	19		20	95.1	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	18.70		20	93.6	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	22.30		20	112	69 - 115		
Methylene Chloride	75-09-2	LCS	20.90		20	105	76 - 121		
mp-Xylene	108383/106423	LCS	37.40		40	93.4	79 - 125		
Naphthalene	91-20-3	LCS	19		20	94.8	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20.80		20	104	78 - 126		
o-Xylene	95-47-6	LCS	18.30		20	91.4	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.90		20	104	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	18.70		20	93.7	72 - 123		
Styrene	100-42-5	LCS	20.60		20	103	79 - 123		
Tetrachloroethene	127-18-4	LCS	19.30		20	96.6	72 - 124		
Toluene	108-88-3	LCS	18.80		20	94	80 - 125		
Total Xylenes	1330-20-7	LCS	55.60		60	92.7	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	22.10		20	111	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.30		20	102	78 - 126		
Trichloroethene	79-01-6	LCS	21.20		20	106	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	21.10		20	106	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.40		20	96.8	58 - 136		
Vinyl Chloride	75-01-4	LCS	19.90		20	99.4	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	33.50	30	112	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	28.20	30	94	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.70	30	102	78 - 116	
Toluene-d8	2037-26-5	LCS	27.50	30	91.6	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3831817 (MB) Created on 05/29/2024 12:49 For QC Batch 1210272

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	31.40	30	105	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	27.40	30	91.4	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	28	30	93.3	78 - 116	
Toluene-d8	2037-26-5	BLK	27.90	30	93.1	76 - 127	

Matrix Spike 3831901 (MS) 3360622012 For QC Batch 1210272

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3831902 (MSD) 3360622012 For QC Batch 1210272

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	20.40	0	20	102	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	19.50	0	20	97.6	78 - 121	RPD 4.17 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	23.70	0	20	118	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	22.50	0	20	113	66 - 130	RPD 4.95 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.50	0	20	113	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	22.60	0	20	113	74 - 135	RPD 0.09 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.90	0	20	104	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	19.60	0	20	98.2	82 - 126	RPD 6.15 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	24.80	0.41	20	122	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	23.40	0.41	20	115	78 - 124	RPD 5.88 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	40.20	13.20	20	135*	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	38.10	13.20	20	125	63 - 128	RPD 5.52 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	23.50	0	20	117	76 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloropropene	563-58-6	MSD	22.10	0	20	111	76 - 126	RPD 5.98 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	18.50	0	20	92.7	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	18.40	0	20	92	61 - 126	RPD 0.78 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	20.80	0	20	104	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	22	0	20	110	75 - 132	RPD 5.80 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	17.80	0	20	89.1	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	17.20	0	20	86.1	67 - 123	RPD 3.40 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.40	0	20	86.9	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.90	0	20	89.7	59 - 133	RPD 3.24 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	20	0	20	100	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	19	0	20	95.2	80 - 124	RPD 5.14 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	19.90	0	20	99.5	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	19.30	0	20	96.4	82 - 118	RPD 3.14 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	23.20	0	20	116	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	22.10	0	20	111	70 - 133	RPD 4.84 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	23.70	0	20	119	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	22.40	0	20	112	81 - 127	RPD 5.44 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	19.50	0	20	97.3	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	19.10	0	20	95.6	81 - 118	RPD 1.74 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.90	0	20	104	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19.70	0	20	98.5	82 - 126	RPD 5.91 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	19.50	0	20	97.5	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	19.40	0	20	96.9	81 - 116	RPD 0.71 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	23.40	0	20	117	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	21.80	0	20	109	64 - 129	RPD 7.05 (Max-18)	
2-Butanone	78-93-3	MS	116	0	100	116	50 - 152		
2-Butanone	78-93-3	MSD	116	0	100	116	50 - 152	RPD 0.09 (Max-16)	
2-Hexanone	591-78-6	MS	115	0	100	115	65 - 154		
2-Hexanone	591-78-6	MSD	112	0	100	112	65 - 154	RPD 2.42 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	118	0	100	118	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	114	0	100	114	71 - 146	RPD 3.19 (Max-16)	
Acetone	67-64-1	MS	101	0	100	101	40 - 151		
Acetone	67-64-1	MSD	103	0	100	103	40 - 151	RPD 2.37 (Max-40)	
Benzene	71-43-2	MS	23.20	0	20	116	80 - 124		
Benzene	71-43-2	MSD	22	0	20	110	80 - 124	RPD 5.37 (Max-26)	
Bromobenzene	108-86-1	MS	20.60	0	20	103	81 - 119		
Bromobenzene	108-86-1	MSD	20.70	0	20	103	81 - 119	RPD 0.34 (Max-17)	
Bromochloromethane	74-97-5	MS	22.80	0	20	114	73 - 117		
Bromochloromethane	74-97-5	MSD	21.80	0	20	109	73 - 117	RPD 4.51 (Max-19)	
Bromodichloromethane	75-27-4	MS	23.10	0	20	116	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.10	0	20	110	79 - 126	RPD 4.80 (Max-16)	
Bromoform	75-25-2	MS	17.50	0	20	87.3	70 - 123		
Bromoform	75-25-2	MSD	18	0	20	90.2	70 - 123	RPD 3.25 (Max-16)	
Bromomethane	74-83-9	MS	24.20	0	20	121	45 - 148		
Bromomethane	74-83-9	MSD	23.70	0	20	118	45 - 148	RPD 2.36 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	28.20	0	20	141*	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	26.90	0	20	134*	62 - 132	RPD 4.74 (Max-17)	
Chlorobenzene	108-90-7	MS	19.50	0	20	97.6	85 - 117		
Chlorobenzene	108-90-7	MSD	18.30	0	20	91.3	85 - 117	RPD 6.75 (Max-15)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorodibromomethane	124-48-1	MS	17.20	0	20	86.2	77 - 122		
Chlorodibromomethane	124-48-1	MSD	16.70	0	20	83.3	77 - 122	RPD 3.51 (Max-15)	
Chloroethane	75-00-3	MS	23.10	0	20	116	51 - 142		
Chloroethane	75-00-3	MSD	21.80	0	20	109	51 - 142	RPD 5.98 (Max-24)	
Chloroform	67-66-3	MS	23.60	0	20	118	78 - 122		
Chloroform	67-66-3	MSD	22.30	0	20	112	78 - 122	RPD 5.69 (Max-16)	
Chloromethane	74-87-3	MS	21.70	0	20	108	38 - 156		
Chloromethane	74-87-3	MSD	20.30	0	20	101	38 - 156	RPD 6.72 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	24	0	20	120	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	22.50	0	20	112	78 - 125	RPD 6.50 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	21.20	0	20	106	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	20	0	20	99.8	81 - 121	RPD 6.20 (Max-16)	
Dibromomethane	74-95-3	MS	21.80	0	20	109	81 - 125		
Dibromomethane	74-95-3	MSD	21.30	0	20	106	81 - 125	RPD 2.51 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	20.10	0	20	101	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	18.90	0	20	94.6	17 - 166	RPD 6.20 (Max-24)	
Diisopropyl ether	108-20-3	MS	25.50	0	20	127	74 - 131		
Diisopropyl ether	108-20-3	MSD	24.50	0	20	122	74 - 131	RPD 4.12 (Max-15)	
Ethylbenzene	100-41-4	MS	20.80	0	20	104	80 - 124		
Ethylbenzene	100-41-4	MSD	18.90	0	20	94.7	80 - 124	RPD 9.48 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	16.80	0	20	84.1	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	17.30	0	20	86.7	55 - 128	RPD 3.14 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	23.50	0	20	117*	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	22.80	0	20	114	69 - 115	RPD 3.11 (Max-20)	
Methylene Chloride	75-09-2	MS	22.90	0	20	115	76 - 121		
Methylene Chloride	75-09-2	MSD	21.60	0	20	108	76 - 121	RPD 5.79 (Max-17)	
mp-Xylene	108383/106423	MS	39.80	0	40	99.4	79 - 125		
mp-Xylene	108383/106423	MSD	37	0	40	92.6	79 - 125	RPD 7.12 (Max-21)	
Naphthalene	91-20-3	MS	19.80	0	20	99	56 - 134		
Naphthalene	91-20-3	MSD	20	0	20	100	56 - 134	RPD 1 (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.70	0	20	108	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.10	0	20	105	78 - 126	RPD 2.85 (Max-17)	
o-Xylene	95-47-6	MS	19.60	0	20	98	79 - 124		
o-Xylene	95-47-6	MSD	18.40	0	20	91.8	79 - 124	RPD 6.56 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.40	0	20	107	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20.90	0	20	105	78 - 125	RPD 2.27 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	19	0	20	95	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	18.60	0	20	93.2	72 - 123	RPD 1.85 (Max-17)	
Styrene	100-42-5	MS	22.30	0	20	111	79 - 123		
Styrene	100-42-5	MSD	21.40	0	20	107	79 - 123	RPD 4.06 (Max-16)	
Tetrachloroethene	127-18-4	MS	18.70	0	20	93.3	72 - 124		
Tetrachloroethene	127-18-4	MSD	17.60	0	20	88.1	72 - 124	RPD 5.78 (Max-38)	
Toluene	108-88-3	MS	20.80	0	20	104	80 - 125		
Toluene	108-88-3	MSD	19.10	0	20	95.7	80 - 125	RPD 8.28 (Max-20)	
Total Xylenes	1330-20-7	MS	59.40	0	60	99	79 - 125		
Total Xylenes	1330-20-7	MSD	55.40	0	60	92.3	79 - 125	RPD 6.94 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	24	0	20	120	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	23.30	0	20	116	71 - 122	RPD 3.08 (Max-22)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
trans-1,3-Dichloropropene	10061-02-6	MS	21.80	0	20	109	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.80	0	20	104	78 - 126	RPD 5.03 (Max-18)	
Trichloroethene	79-01-6	MS	22.80	0	20	114	77 - 124		
Trichloroethene	79-01-6	MSD	21.30	0	20	106	77 - 124	RPD 6.92 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	24.50	0	20	122	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	23.10	0	20	116	38 - 123	RPD 5.79 (Max-23)	
Vinyl Acetate	108-05-4	MS	17.50	0	20	87.5	58 - 136		
Vinyl Acetate	108-05-4	MSD	17.60	0	20	88.1	58 - 136	RPD 0.69 (Max-17)	
Vinyl Chloride	75-01-4	MS	23.20	0	20	116	27 - 138		
Vinyl Chloride	75-01-4	MSD	21	0	20	105	27 - 138	RPD 9.81 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	34.10	30	114	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	32.70	30	109	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	26.90	30	89.6	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.60	30	102	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.50	30	102	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	30.20	30	101	78 - 116	
Toluene-d8	2037-26-5	MS	27.30	30	91.2	76 - 127	
Toluene-d8	2037-26-5	MSD	27.70	30	92.2	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3360622001	MW-35D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622002	MW-34D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622003	MW-33D-295	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622004	MW-33D-235	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622005	MW-30D-413	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622006	MW-30D-273	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622007	MW-29D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622008	MW-45	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622009	Trip Blank C	N/A	N/A	N/A		SW846 8260D	1209901
3360622010	MW-24D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272
3360622011	MW-32D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272
3360622012	MW-28D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272
3360622013	MW-25D-130	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272
3360622014	MW-25D-190	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1209901
3360622015	MW-36D	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272
3360622016	Trip Blank-D	N/A	N/A	N/A		SW846 8260D	1210272
3360622017	MW-200	SW846 3510C N/A	1207926 N/A	05/23/2024 09:45 N/A	MJA	SW846 8270E SIM SW846 8260D	1209058 1210272

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Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 1 of 2

ALS Quote #:

3360622
Logged By: SLS
PM: SJB

Client Name: WSP USA

Address:
13530 Dulles Technology Dr
Suite 300
Herndon VA 20171

Contact: Eric Johnson

Phone#:

Project Name/#: 31405608.011 Kop-Flex offsite

Bill To:

Purchase Order #: P102840US001

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [ ]

Container Type	CG	AG								
Container Size	40	250								
Preservative	HCl	NA								

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs EPA 8260	8270 1,4 Dioxane
1	MW-35D	5/20/24	0815		G	GW	2x	2x
2	MW-34D	5/20/24	0835		G	GW	2x	2x
3	MW-33D-295	5/20/24	0905		G	GW	2x	2x
4	MW-33D-235	5/20/24	0915		G	GW	2x	2x
5	MW-30D-413	5/20/24	0935		G	GW	2x	2x
6	MW-30D-273	5/20/24	0945		G	GW	2x	2x
7	MW-29D	5/20/24	1125		G	GW	2x	2x
8	MW-45	5/20/24	1245		G	GW	2x	2x
9	Trip Blank C						2x	
10								DPB 5/20/24

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
5/20/24	1555	1	[illegible] / WSP	2	D. Blank ALS
5/20/24	1749	3	D. Blank ALS	4	
		5		6	
	8:00 5/21/24	7		8	
		9		10	

Receipt Information

Temp Taken By: Therm ID: WO Temp (°C)

WV Containers 0-6°C Y N NA

Temp By:	WO Temp (°C)	Therm ID
DPB	2°	571

Receipt Info Completed By:	DPB
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N NA
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

No Sample

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Rad Screen (uCi)

New Source? Y N

New Source Contact:

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

pm notified
WS23M

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 2 3360622 of
ALS Quote #:

Client Name: WSP USA
Address: 13530 Dulles Technology Dr, Suite 300, Herndon VA 20171
Contact: Eric Johnson
Phone#:
Project Name/#: 31405608.011 Kop-Flex offsite
Bill To:
Purchase Order #: P102846US001
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email?

Container Type			CG	AG										
Container Size			40	250										
Preservative			HCl	NA										
ANALYSIS / METHOD REQUESTED			VOC, EPA 8260	8270 1,4 Dioxane										
Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Enter Number of Containers Per Sample or Field Results Below.								
1 MW-24D	5/20/24	1305		G	GW	2X	2X							
2 MW-32D	5/20/24	1330		G	GW	2X	2X							
3 MW-28D	5/20/24	1350		G	GW	2	2							
4 MW-25D-130	5/20/24	1415		G	GW	2X	2X							
5 MW-25D-190 MS/MSD	5/20/24	1420		G	GW	6	5							
6 MW-36D	5/20/24	1500		G	GW	2X	2X							
7 Trip Blank-D	5/20/24					2X								
8														
9														
10														

Dpm 5/20/24

Receipt Information (completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by:_____ WV Containers 0-6°C Y N NA
Cooler Custody Seals Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Coolers & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA only: Trip Blank Y N NA
NJ ≤ 4 days? Y N
Courier/Tracking #
Deviations? NO YES
If YES, list below:
Client contact:
Date/Tech:
Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?_____
PWSID #__
Rad Screen (uCi)_____
New Source? Y N
New Source Contact:
PWS Contact:_____ PWS Phone #:_____

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time	Relinquished By / Company Name	Received By / Company Name
5/20/24	1555	1 [signature] / WSP	2 [signature] ALS
5/20/24	1750	3 D. Blouch ALS	4
		5	6
		7	8
		9	10

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL ____ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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Rev 07.06 2023

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Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 2 3360622 of

Client Name: WSP USA

Address: 13530 Dulles Technology Dr, Suite 300, Herndon VA 20171

Contact: Eric Johnson

Phone#:

Project Name#: 34056008.011 KOP Flex Office

Bill To:

Purchase Order #: P102846US001

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [ ]

Container Type	C6	AG								
Container Size	40	250								
Preservative	HCl	NA								

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (will appear on the labelpack)	Date Collected (mm/dd/yy)	Time (hh:mm)	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOC, EPA 8260	8270 1,4 Dioxane								
1	MW-24D	5/20/24	1305		G	GW	2X	2X								
2	MW-32D	5/20/24	1330		G	GW	2X	2X								
3	MW-28D	5/20/24	1350		G	GW	2	2								
4	MW-25D-130	5/20/24	1415		G	GW	2X	2X								
5	MW-25D-190 MS/MSD	5/20/24	1420		G	GW	6	5								
6	MW-36D	5/20/24	1500		G	GW	2X	2X								
7	Trip Blank-D	5/20/24					2X									
8	MW-200	5/20/24	1210		G	GW	2X	2X								
9																
10																

Enter Number of Containers Per Sample or Field Results Below.

5/20/24

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Date	Time		Relinquished By / Company Name		Received By / Company Name
5/20/24	1555	1	[signature] WSP	2	[signature] ALS
5/20/24	1700	3	[signature] ALS	4	
	5/21	5		6	
		7		8	
		9		10	

Receipt information completed by Receiving Lab

Temp Taken By: Therm ID: IR Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #:

Deviations? NO YES If YES

Client contact:

Date/Time:

Sample(s) for Radiation Testing? Y N Rad Screen (uCi)

Reportable SDWA Samples? Y N New Source? Y N

SDWA State of Origin:

New Source Contact:

PWSID #:

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Level 1 [ ] Standard Level 2 [ ] Standard Level 3 [ ] Standard Level 4 [ ] CLP like [ ] EDD [ ] NJ REG [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS:

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL

*G=Grab C=Composite **Matrix: A=Air D=Drinking Water GW=Groundwater O=Oil WW=Liquid Waste S=Solid/Soil/Sludge SW=Surface Water WP=Wipe WW=Wastewater

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Rev 07 28 2023

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **WSP USA Inc.**

Project	KOP-Flex Offsite 31405608.011
Workorder	3364481
Report ID	331780 on 6/26/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jun 14, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Elliott Martynkiewicz - WSP USA Inc.
Eric Johnson - WSP USA INC

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3364481001	MW-31D	Ground Water	06/13/2024 15:30	06/14/2024 08:45		WSP USA Inc.
3364481002	MW-46D	Ground Water	06/12/2024 16:25	06/14/2024 08:45		WSP USA Inc.

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	Bromomethane recovery from the 8260D calibration verification standard was 122%. Control limits are 80 to 120%.

Detected Results Summary

Client Sample ID	MW-46D	Collected	06/12/2024 16:25
Lab Sample ID	3364481002	Lab Receipt	06/14/2024 08:45

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	30.2	ug/L	5.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	16.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	65.9	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-31D	Collected	06/13/2024 15:30
Lab Sample ID	3364481001	Lab Receipt	06/14/2024 08:45

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	06/23/2024 04:00	M1O	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	90.3%	29 – 112	06/23/2024 04:00	
Fluoranthene-d10	93951-69-0	95.8%	45 – 130	06/23/2024 04:00	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A

Results

Client Sample ID	MW-31D	Collected	06/13/2024 15:30
Lab Sample ID	3364481001	Lab Receipt	06/14/2024 08:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:10	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:10	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	112%	62 – 133	06/22/2024 14:10	
4-Bromofluorobenzene	460-00-4	107%	79 – 114	06/22/2024 14:10	
Dibromofluoromethane	1868-53-7	102%	78 – 116	06/22/2024 14:10	
Toluene-d8	2037-26-5	101%	76 – 127	06/22/2024 14:10	

Results

Client Sample ID	MW-46D	Collected	06/12/2024 16:25
Lab Sample ID	3364481002	Lab Receipt	06/14/2024 08:45

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	30.2		ug/L	5.0	SW846 8270E SIM	5	06/23/2024 12:16	CGS	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	63.2%	29 – 112	06/23/2024 03:05	
2-Methylnapthalene-d10	7297-45-2	61.4%	29 – 112	06/23/2024 12:16	
Fluoranthene-d10	93951-69-0	59.2%	45 – 130	06/23/2024 03:05	
Fluoranthene-d10	93951-69-0	60.7%	45 – 130	06/23/2024 12:16	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1,1-Trichloroethane	2.4		ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1-Dichloroethane	16.4		ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1-Dichloroethene	65.9		ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Bromomethane	1.0 U	U,1	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A

Results

Client Sample ID	MW-46D	Collected	06/12/2024 16:25
Lab Sample ID	3364481002	Lab Receipt	06/14/2024 08:45

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	06/22/2024 14:30	TMP	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	06/22/2024 14:30	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	06/22/2024 14:30	
4-Bromofluorobenzene	460-00-4	96.8%	79 – 114	06/22/2024 14:30	
Dibromofluoromethane	1868-53-7	98.1%	78 – 116	06/22/2024 14:30	
Toluene-d8	2037-26-5	97.1%	76 – 127	06/22/2024 14:30	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3364481001	MW-31D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3364481002	MW-46D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1224338	Prep Method	SW846 3510C
Date	06/19/2024 16:10	Analysis Method	SW846 8270E SIM
Tech.	BMP		

Associated Samples

3364481001 3364481002

Method Blank 3841679 (MB) Created on 06/19/2024 14:34 For QC Batch 1224338

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.72	1	72.2	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.90	1	89.9	45 - 130	

Lab Control Standard 3841680 (LCS) Created on 06/19/2024 14:34 For QC Batch 1224338

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.57		1	57.5	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.75	1	74.6	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.95	1	95.1	45 - 130	

Matrix Spike 3841681 (MS) 3364481002 For QC Batch 1224338

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	33.90	30.20	1	NC	22 - 75		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	0.83	1	82.6	29 - 112	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
Fluoranthene-d10	93951-69-0	MS	0.91	1	91.1	45 - 130	

Duplicate 3841682 (DUP) 3364481001 For QC Batch 1224338

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
1,4-Dioxane	123-91-1	DUP	0.0596	0.0579	RPD	2.75	(Max-30)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.77	1	76.6	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.97	1	96.8	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1228213	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3364481001 3364481002

Matrix Spike 3843099 (MS) 3364169005 (non-Project Sample) For QC Batch 1228213

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3843100 (MSD) 3364169005 (non-Project Sample) For QC Batch 1228213

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	19.80	0	20	98.8	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	18.30	0	20	91.6	78 - 121	RPD 7.55 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	20.80	0	20	104	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	18.40	0	20	91.9	66 - 130	RPD 12.60 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	23.70	0	20	118	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.10	0	20	105	74 - 135	RPD 11.60 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.90	0	20	105	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	19.60	0	20	98.1	82 - 126	RPD 6.54 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	21.20	0	20	106	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	18.60	0	20	93.1	78 - 124	RPD 12.70 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	20.80	0	20	104	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	18.60	0	20	93.2	63 - 128	RPD 10.90 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	21	0	20	105	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	18.90	0	20	94.3	76 - 126	RPD 10.90 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	21	0	20	105	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	18.10	0	20	90.7	61 - 126	RPD 14.70 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	22.90	0	20	115	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	20.60	0	20	103	75 - 132	RPD 10.60 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.20	0	20	106	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	19	0	20	95.1	67 - 123	RPD 10.90 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	18.80	0	20	94	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	18.20	0	20	91.2	59 - 133	RPD 3.06 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	19.30	0	20	96.5	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	18.10	0	20	90.3	80 - 124	RPD 6.65 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	21.80	0	20	109	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	19.80	0	20	99	82 - 118	RPD 9.80 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	20.90	0	20	104	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	18.60	0	20	93.1	70 - 133	RPD 11.40 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	22.20	0	20	111	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	19.90	0	20	99.5	81 - 127	RPD 10.80 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	22	0	20	110	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	19.60	0	20	98.1	81 - 118	RPD 11.20 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.30	0	20	102	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	19.30	0	20	96.5	82 - 126	RPD 5.11 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	21.60	0	20	108	81 - 116		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MSD	19.60	0	20	98.1	81 - 116	RPD 9.68 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	18.40	0	20	92.2	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	16.80	0	20	84	64 - 129	RPD 9.32 (Max-18)	
2-Butanone	78-93-3	MS	111	0	100	111	50 - 152		
2-Butanone	78-93-3	MSD	99.10	0	100	99.1	50 - 152	RPD 11.10 (Max-16)	
2-Hexanone	591-78-6	MS	114	0	100	114	65 - 154		
2-Hexanone	591-78-6	MSD	107	0	100	107	65 - 154	RPD 6.21 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	113	0	100	113	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	71 - 146	RPD 5.92 (Max-16)	
Acetone	67-64-1	MS	91.10	0	100	91.1	40 - 151		
Acetone	67-64-1	MSD	82.70	0	100	82.7	40 - 151	RPD 9.66 (Max-40)	
Benzene	71-43-2	MS	21	0	20	105	80 - 124		
Benzene	71-43-2	MSD	18.70	0	20	93.4	80 - 124	RPD 11.40 (Max-26)	
Bromobenzene	108-86-1	MS	21.80	0	20	109	81 - 119		
Bromobenzene	108-86-1	MSD	19.70	0	20	98.4	81 - 119	RPD 10.30 (Max-17)	
Bromochloromethane	74-97-5	MS	21.10	0	20	105	73 - 117		
Bromochloromethane	74-97-5	MSD	19	0	20	95.2	73 - 117	RPD 10.20 (Max-19)	
Bromodichloromethane	75-27-4	MS	19.50	0	20	97.6	79 - 126		
Bromodichloromethane	75-27-4	MSD	17.70	0	20	88.7	79 - 126	RPD 9.53 (Max-16)	
Bromoform	75-25-2	MS	17.40	0	20	86.9	70 - 123		
Bromoform	75-25-2	MSD	16	0	20	80.2	70 - 123	RPD 8.01 (Max-16)	
Bromomethane	74-83-9	MS	22.30	0.53	20	109	45 - 148		
Bromomethane	74-83-9	MSD	20.80	0.53	20	102	45 - 148	RPD 6.80 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	21.50	0	20	107	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	18.90	0	20	94.3	62 - 132	RPD 13.10 (Max-17)	
Chlorobenzene	108-90-7	MS	19.80	0	20	98.9	85 - 117		
Chlorobenzene	108-90-7	MSD	18.40	0	20	92.2	85 - 117	RPD 6.95 (Max-15)	
Chlorodibromomethane	124-48-1	MS	17	0	20	85	77 - 122		
Chlorodibromomethane	124-48-1	MSD	16	0	20	80	77 - 122	RPD 6.03 (Max-15)	
Chloroethane	75-00-3	MS	19.40	0	20	97	51 - 142		
Chloroethane	75-00-3	MSD	17	0	20	85.1	51 - 142	RPD 13 (Max-24)	
Chloroform	67-66-3	MS	20.80	0	20	104	78 - 122		
Chloroform	67-66-3	MSD	18.20	0	20	90.9	78 - 122	RPD 13.30 (Max-16)	
Chloromethane	74-87-3	MS	20.30	0	20	102	38 - 156		
Chloromethane	74-87-3	MSD	18.50	0	20	92.3	38 - 156	RPD 9.59 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22.80	1.30	20	107	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	20.30	1.30	20	95	78 - 125	RPD 11.40 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	18.40	0	20	92.2	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	17.50	0	20	87.5	81 - 121	RPD 5.22 (Max-16)	
Dibromomethane	74-95-3	MS	20.40	0	20	102	81 - 125		
Dibromomethane	74-95-3	MSD	18.60	0	20	93	81 - 125	RPD 9.03 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	18.60	0	20	93.1	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	16.40	0	20	82.1	17 - 166	RPD 12.60 (Max-24)	
Diisopropyl ether	108-20-3	MS	22.30	0	20	112	74 - 131		
Diisopropyl ether	108-20-3	MSD	20.10	0	20	101	74 - 131	RPD 10.50 (Max-15)	
Ethylbenzene	100-41-4	MS	20.70	0	20	103	80 - 124		
Ethylbenzene	100-41-4	MSD	18.60	0	20	93.1	80 - 124	RPD 10.40 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	20.20	0	20	101	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	18.90	0	20	94.4	55 - 128	RPD 6.74 (Max-35)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl t-Butyl Ether	1634-04-4	MS	26.50	5.70	20	104	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	24.10	5.70	20	92.2	69 - 115	RPD 9.62 (Max-20)	
Methylene Chloride	75-09-2	MS	19.30	0	20	96.4	76 - 121		
Methylene Chloride	75-09-2	MSD	17.60	0	20	87.9	76 - 121	RPD 9.31 (Max-17)	
mp-Xylene	108383/106423	MS	39.90	0	40	99.8	79 - 125		
mp-Xylene	108383/106423	MSD	37.20	0	40	93.1	79 - 125	RPD 6.99 (Max-21)	
Naphthalene	91-20-3	MS	20.90	0	20	105	56 - 134		
Naphthalene	91-20-3	MSD	19.40	0	20	97.2	56 - 134	RPD 7.42 (Max-40)	
o-Chlorotoluene	95-49-8	MS	22.90	0	20	114	78 - 126		
o-Chlorotoluene	95-49-8	MSD	20.20	0	20	101	78 - 126	RPD 12.30 (Max-17)	
o-Xylene	95-47-6	MS	19.50	0	20	97.7	79 - 124		
o-Xylene	95-47-6	MSD	18.10	0	20	90.3	79 - 124	RPD 7.92 (Max-19)	
p-Chlorotoluene	106-43-4	MS	22.80	0	20	114	78 - 125		
p-Chlorotoluene	106-43-4	MSD	20.30	0	20	102	78 - 125	RPD 11.60 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.80	0	20	114	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	20.30	0	20	101	72 - 123	RPD 11.80 (Max-17)	
Styrene	100-42-5	MS	22.70	0	20	114	79 - 123		
Styrene	100-42-5	MSD	20.20	0	20	101	79 - 123	RPD 11.70 (Max-16)	
Tetrachloroethene	127-18-4	MS	17	0	20	85	72 - 124		
Tetrachloroethene	127-18-4	MSD	15.60	0	20	78.2	72 - 124	RPD 8.25 (Max-38)	
Toluene	108-88-3	MS	19.30	0	20	96.7	80 - 125		
Toluene	108-88-3	MSD	18.30	0	20	91.4	80 - 125	RPD 5.61 (Max-20)	
Total Xylenes	1330-20-7	MS	59.50	0	60	99.1	79 - 125		
Total Xylenes	1330-20-7	MSD	55.30	0	60	92.1	79 - 125	RPD 7.29 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21	0	20	105	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	18.50	0	20	92.6	71 - 122	RPD 12.70 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	17.90	0	20	89.3	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	17	0	20	85	78 - 126	RPD 4.95 (Max-18)	
Trichloroethene	79-01-6	MS	20.10	0	20	101	77 - 124		
Trichloroethene	79-01-6	MSD	17.90	0	20	89.7	77 - 124	RPD 11.50 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	19.50	0	20	97.5	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	17.20	0	20	86.2	38 - 123	RPD 12.30 (Max-23)	
Vinyl Acetate	108-05-4	MS	14.10	0	20	70.5	58 - 136		
Vinyl Acetate	108-05-4	MSD	13.50	0	20	67.3	58 - 136	RPD 4.60 (Max-17)	
Vinyl Chloride	75-01-4	MS	18.60	0	20	93.2	27 - 138		
Vinyl Chloride	75-01-4	MSD	17	0	20	84.8	27 - 138	RPD 9.42 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	32.60	30	109	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.80	30	106	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.10	30	100	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	27.40	30	91.3	79 - 114	
Dibromofluoromethane	1868-53-7	MS	31.10	30	104	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29	30	96.6	78 - 116	
Toluene-d8	2037-26-5	MS	28.40	30	94.6	76 - 127	
Toluene-d8	2037-26-5	MSD	27.90	30	93.2	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3843097 (MB) Created on 06/22/2024 11:21 For QC Batch 1228213

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	31.60	30	105	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.20	30	97.2	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29	30	96.8	78 - 116	
Toluene-d8	2037-26-5	BLK	29.90	30	99.8	76 - 127	

Lab Control Standard 3843098 (LCS) Created on 06/22/2024 11:21 For QC Batch 1228213

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	20.60		20	103	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	19.60		20	97.9	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	23.30		20	116	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.60		20	108	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.10		20	100	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	19.70		20	98.6	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.50		20	102	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.80		20	109	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	22.50		20	113	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	22.70		20	114	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	19.30		20	96.4	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	20.30		20	101	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	22.60		20	113	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.70		20	98.4	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	21.40		20	107	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	22.50		20	113	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20.70		20	104	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	LCS	22.30		20	112	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	20.60		20	103	64 - 129		
2-Butanone	78-93-3	LCS	104		100	104	50 - 152		
2-Hexanone	591-78-6	LCS	115		100	115	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	112		100	112	71 - 146		
Acetone	67-64-1	LCS	104		100	104	40 - 151		
Benzene	71-43-2	LCS	19.90		20	99.3	80 - 124		
Bromobenzene	108-86-1	LCS	22.10		20	111	81 - 119		
Bromochloromethane	74-97-5	LCS	21.30		20	106	73 - 117		
Bromodichloromethane	75-27-4	LCS	19.20		20	96	79 - 126		
Bromoform	75-25-2	LCS	18.10		20	90.4	70 - 123		
Bromomethane	74-83-9	LCS	22.70		20	113	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	17.70		20	88.4	62 - 132		
Chlorobenzene	108-90-7	LCS	20.20		20	101	85 - 117		
Chlorodibromomethane	124-48-1	LCS	18.20		20	91.1	77 - 122		
Chloroethane	75-00-3	LCS	18.60		20	92.9	51 - 142		
Chloroform	67-66-3	LCS	19.80		20	99	78 - 122		
Chloromethane	74-87-3	LCS	19.40		20	96.9	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.70		20	103	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.20		20	101	81 - 121		
Dibromomethane	74-95-3	LCS	20.20		20	101	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	16.50		20	82.6	17 - 166		
Diisopropyl ether	108-20-3	LCS	22.10		20	111	74 - 131		
Ethylbenzene	100-41-4	LCS	20.20		20	101	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.90		20	114	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.90		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	18.90		20	94.4	76 - 121		
mp-Xylene	108383/106423	LCS	40.60		40	101	79 - 125		
Naphthalene	91-20-3	LCS	22.10		20	111	56 - 134		
o-Chlorotoluene	95-49-8	LCS	22.40		20	112	78 - 126		
o-Xylene	95-47-6	LCS	19.90		20	99.3	79 - 124		
p-Chlorotoluene	106-43-4	LCS	22.60		20	113	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.20		20	116	72 - 123		
Styrene	100-42-5	LCS	22.50		20	112	79 - 123		
Tetrachloroethene	127-18-4	LCS	17.90		20	89.7	72 - 124		
Toluene	108-88-3	LCS	20		20	99.8	80 - 125		
Total Xylenes	1330-20-7	LCS	60.40		60	101	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.10		20	101	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	19.80		20	99.1	78 - 126		
Trichloroethene	79-01-6	LCS	19.50		20	97.7	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	18.40		20	92.2	38 - 123		
Vinyl Acetate	108-05-4	LCS	16.90		20	84.7	58 - 136		
Vinyl Chloride	75-01-4	LCS	17.40		20	87.2	27 - 138		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	31.70	30	106	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	31.80	30	106	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	31.30	30	104	78 - 116	
Toluene-d8	2037-26-5	LCS	29.70	30	99	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3364481001	MW-31D	SW846 3510C	1224338	06/19/2024 16:10	BMP	SW846 8270E SIM	1228308
		N/A	N/A	N/A		SW846 8260D	1228213
3364481002	MW-46D	SW846 3510C	1224338	06/19/2024 16:10	BMP	SW846 8270E SIM	1228308
		SW846 3510C	1224338	06/19/2024 16:10	BMP	SW846 8270E SIM	1228710
		N/A	N/A	N/A		SW846 8260D	1228213

CHAIN-OF-CUSTODY RECORD

3364481

Logged By: SLS
PM: SJB

0039

Page 1 of 1

WSP USA Office Address: 13530 Dulles Technology Dr Suite 300 Herndon VA 20171

Project Name: Kop-Flex offsite

WSP USA Contact Name: Eric Johnson

Project Location: Hanover MD

WSP USA Contact E-mail: eric.johnson@wsp.com @wsp.com

Project Number & Task: P102840US001

WSP USA Contact Phone: (703) 318-3936

Sampler(s) Name(s): Elliott Martynkiewicz

Sampler(s) Signature(s): Elliott

Name & Location: Middletown PA

Laboratory Project Manager: Susan Scherer

Requested Turn-Around-Time: ☐ Standard ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ ____ HR

Requested Ana

Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	VOCs EPA 8260	8270 - 1,4-Dioxane	Sample Comments
MW-31D	GW			6/12/24	1530	4	2	2	
MW-46D	GW			6/12/24	1625	4	2	2	

Temp By: MSE | WO Temp (°C): 3° | Therm ID: 524

Receipt Info Completed By:	MJE
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	—
Courier/Tracking #:	776850293047
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

*NoG/C., G/HCL., A/UNP - MSE 6/18/24

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
Elliott	6/13/24	1206	Fedex				
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
Fedex	6/14/24	845		6/14/24	845		

Use two time boxes for composite and/or air samples: use only start time/date for all other samples.

Matrix: AQ = Aqueous, S = Soil, SE = Sediment, A = Air, W = Wipe, B = Bulk, O = Other (detail in comments)

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **WSP USA Inc.**

Project	Kop Flex Off Site
Workorder	3387075
Report ID	369463 on 11/26/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 11, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
- Elliott Martynkiewicz - WSP USA Inc.
- Eric Johnson - WSP USA INC
- Erik Reinert - WSP USA Inc

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3387075001	MW-35D	Ground Water	11/11/2024 08:50	11/11/2024 17:33	CBC	Collected By Client
3387075002	MW-34D	Ground Water	11/11/2024 09:10	11/11/2024 17:33	CBC	Collected By Client
3387075003	MW-33-295	Ground Water	11/11/2024 09:40	11/11/2024 17:33	CBC	Collected By Client
3387075004	MW-33-235	Ground Water	11/11/2024 09:50	11/11/2024 17:33	CBC	Collected By Client
3387075005	MW-30D-413	Ground Water	11/11/2024 10:10	11/11/2024 17:33	CBC	Collected By Client
3387075006	MW-30D-273	Ground Water	11/11/2024 10:25	11/11/2024 17:33	CBC	Collected By Client
3387075007	MW-29D	Ground Water	11/11/2024 10:50	11/11/2024 17:33	CBC	Collected By Client
3387075008	MW-32D	Ground Water	11/11/2024 11:15	11/11/2024 17:33	CBC	Collected By Client
3387075009	Trip Blank D	Ground Water	11/11/2024 00:00	11/11/2024 17:33	CBC	Collected By Client
3387075010	MW-28D	Ground Water	11/11/2024 11:45	11/11/2024 17:33	CBC	Collected By Client
3387075011	MW-36D	Ground Water	11/11/2024 12:00	11/11/2024 17:33	CBC	Collected By Client
3387075012	MW-45	Ground Water	11/11/2024 13:15	11/11/2024 17:33	CBC	Collected By Client
3387075013	MW-24D	Ground Water	11/11/2024 13:30	11/11/2024 17:33	CBC	Collected By Client
3387075014	Trip Blank E	Ground Water	11/11/2024 13:30	11/11/2024 17:33	CBC	Collected By Client
3387075015	MW-46D	Ground Water	11/10/2024 17:10	11/11/2024 17:33	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The surrogate 2-Methylnapthalene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 0 and the control limits were 29 to 112. This result was reported at a dilution of 20.
2	The surrogate Fluoranthene-d10 for method SW846 8270E SIM was outside of control limits. The % Recovery was reported as 0 and the control limits were 45 to 130. This result was reported at a dilution of 20.

Detected Results Summary

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	3.9	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	9.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-30D-273	Collected	11/11/2024 10:25
Lab Sample ID	3387075006	Lab Receipt	11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	11.7	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	1.3	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	50.7	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	4.6	ug/L	1.1	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethene	12.2	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-24D	Collected	11/11/2024 13:30
Lab Sample ID	3387075013	Lab Receipt	11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	160	ug/L	20.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1-Dichloroethane	73.8	ug/L	10.0	SW846 8260D	#
1,1-Dichloroethene	947	ug/L	10.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	26.8	ug/L	10.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	1.2	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	7.4	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	36.5	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-35D	Collected	11/11/2024 08:50
Lab Sample ID	3387075001	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/18/2024 14:26	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57.7%	29 – 112	11/18/2024 14:26	
Fluoranthene-d10	93951-69-0	80.2%	45 – 130	11/18/2024 14:26	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A

Results

Client Sample ID	MW-35D	Collected	11/11/2024 08:50
Lab Sample ID	3387075001	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:00	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	62 – 133	11/22/2024 17:00	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	11/22/2024 17:00	
Dibromofluoromethane	1868-53-7	98%	78 – 116	11/22/2024 17:00	
Toluene-d8	2037-26-5	100%	76 – 127	11/22/2024 17:00	

Results

Client Sample ID	MW-34D	Collected	11/11/2024 09:10
Lab Sample ID	3387075002	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/18/2024 15:21	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.1%	29 – 112	11/18/2024 15:21	
Fluoranthene-d10	93951-69-0	79.4%	45 – 130	11/18/2024 15:21	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A

Results

Client Sample ID	MW-34D	Collected	11/11/2024 09:10
Lab Sample ID	3387075002	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 17:20	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 17:20	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	11/22/2024 17:20	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	11/22/2024 17:20	
Dibromofluoromethane	1868-53-7	98.4%	78 – 116	11/22/2024 17:20	
Toluene-d8	2037-26-5	98.7%	76 – 127	11/22/2024 17:20	

Results

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	3.9		ug/L	1.0	SW846 8270E SIM	1	11/18/2024 15:48	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	60.8%	29 – 112	11/18/2024 15:48	
Fluoranthene-d10	93951-69-0	75.5%	45 – 130	11/18/2024 15:48	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloroethene	9.2		ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A

Results

Client Sample ID	MW-33-295	Collected	11/11/2024 09:40
Lab Sample ID	3387075003	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:41	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	11/22/2024 19:41	
4-Bromofluorobenzene	460-00-4	98.8%	79 – 114	11/22/2024 19:41	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 19:41	
Toluene-d8	2037-26-5	108%	76 – 127	11/22/2024 19:41	

Results

Client Sample ID	MW-33-235	Collected	11/11/2024 09:50
Lab Sample ID	3387075004	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/18/2024 16:43	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59%	29 – 112	11/18/2024 16:43	
Fluoranthene-d10	93951-69-0	70.4%	45 – 130	11/18/2024 16:43	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A

Results

Client Sample ID	MW-33-235	Collected	11/11/2024 09:50
Lab Sample ID	3387075004	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:01	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	11/22/2024 20:01	
4-Bromofluorobenzene	460-00-4	105%	79 – 114	11/22/2024 20:01	
Dibromofluoromethane	1868-53-7	103%	78 – 116	11/22/2024 20:01	
Toluene-d8	2037-26-5	108%	76 – 127	11/22/2024 20:01	

Results

Client Sample ID	MW-30D-413	Collected	11/11/2024 10:10
Lab Sample ID	3387075005	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/19/2024 14:07	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	61%	29 – 112	11/19/2024 14:07	
Fluoranthene-d10	93951-69-0	76.8%	45 – 130	11/19/2024 14:07	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A

Results

Client Sample ID	MW-30D-413	Collected	11/11/2024 10:10
Lab Sample ID	3387075005	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:21	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	62 – 133	11/22/2024 20:21	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 20:21	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 20:21	
Toluene-d8	2037-26-5	106%	76 – 127	11/22/2024 20:21	

Results

Client Sample ID	MW-30D-273	Collected	11/11/2024 10:25
Lab Sample ID	3387075006	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	11.7		ug/L	1.0	SW846 8270E SIM	1	11/18/2024 17:38	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57.9%	29 – 112	11/18/2024 17:38	
Fluoranthene-d10	93951-69-0	73.9%	45 – 130	11/18/2024 17:38	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,1-Trichloroethane	1.7		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloroethane	1.3		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloroethene	50.7		ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A

Results

Client Sample ID	MW-30D-273	Collected	11/11/2024 10:25
Lab Sample ID	3387075006	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 20:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 20:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 20:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 20:41	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.3%	62 – 133	11/22/2024 20:41	
4-Bromofluorobenzene	460-00-4	98.8%	79 – 114	11/22/2024 20:41	
Dibromofluoromethane	1868-53-7	95.7%	78 – 116	11/22/2024 20:41	
Toluene-d8	2037-26-5	101%	76 – 127	11/22/2024 20:41	

Results

Client Sample ID	MW-29D	Collected	11/11/2024 10:50
Lab Sample ID	3387075007	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/18/2024 18:06	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	62.8%	29 – 112	11/18/2024 18:06	
Fluoranthene-d10	93951-69-0	74.5%	45 – 130	11/18/2024 18:06	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A

Results

Client Sample ID	MW-29D	Collected	11/11/2024 10:50
Lab Sample ID	3387075007	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:01	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	62 – 133	11/22/2024 21:01	
4-Bromofluorobenzene	460-00-4	104%	79 – 114	11/22/2024 21:01	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 21:01	
Toluene-d8	2037-26-5	108%	76 – 127	11/22/2024 21:01	

Results

Client Sample ID	MW-32D	Collected	11/11/2024 11:15
Lab Sample ID	3387075008	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1 U	U	ug/L	1.1	SW846 8270E SIM	1	11/18/2024 18:34	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	65.4%	29 – 112	11/18/2024 18:34	
Fluoranthene-d10	93951-69-0	75.2%	45 – 130	11/18/2024 18:34	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A

Results

Client Sample ID	MW-32D	Collected	11/11/2024 11:15
Lab Sample ID	3387075008	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:21	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.1%	62 – 133	11/22/2024 21:21	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	11/22/2024 21:21	
Dibromofluoromethane	1868-53-7	97.9%	78 – 116	11/22/2024 21:21	
Toluene-d8	2037-26-5	103%	76 – 127	11/22/2024 21:21	

Results

Client Sample ID	Trip Blank D	Collected	11/11/2024 00:00
Lab Sample ID	3387075009	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:02	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:02	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A

Results

Client Sample ID	Trip Blank D	Collected	11/11/2024 00:00
Lab Sample ID	3387075009	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:02	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:02	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:02	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94%	62 – 133	11/22/2024 19:02	
4-Bromofluorobenzene	460-00-4	97.5%	79 – 114	11/22/2024 19:02	
Dibromofluoromethane	1868-53-7	97.2%	78 – 116	11/22/2024 19:02	
Toluene-d8	2037-26-5	102%	76 – 127	11/22/2024 19:02	

Results

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	4.6		ug/L	1.1	SW846 8270E SIM	1	11/18/2024 19:01	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	55.5%	29 – 112	11/18/2024 19:01	
Fluoranthene-d10	93951-69-0	63.1%	45 – 130	11/18/2024 19:01	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloroethene	12.2		ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A

Results

Client Sample ID	MW-28D	Collected	11/11/2024 11:45
Lab Sample ID	3387075010	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 21:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 21:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 21:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 21:41	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	62 – 133	11/22/2024 21:41	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 21:41	
Dibromofluoromethane	1868-53-7	97.7%	78 – 116	11/22/2024 21:41	
Toluene-d8	2037-26-5	102%	76 – 127	11/22/2024 21:41	

Results

Client Sample ID	MW-36D	Collected	11/11/2024 12:00
Lab Sample ID	3387075011	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	11/18/2024 19:29	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	54.7%	29 – 112	11/18/2024 19:29	
Fluoranthene-d10	93951-69-0	68.1%	45 – 130	11/18/2024 19:29	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:01	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A

Results

Client Sample ID	MW-36D	Collected	11/11/2024 12:00
Lab Sample ID	3387075011	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:01	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:01	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:01	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:01	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	62 – 133	11/22/2024 22:01	
4-Bromofluorobenzene	460-00-4	96.4%	79 – 114	11/22/2024 22:01	
Dibromofluoromethane	1868-53-7	97.3%	78 – 116	11/22/2024 22:01	
Toluene-d8	2037-26-5	101%	76 – 127	11/22/2024 22:01	

Results

Client Sample ID	MW-45	Collected	11/11/2024 13:15
Lab Sample ID	3387075012	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.1 U	U	ug/L	1.1	SW846 8270E SIM	1	11/18/2024 19:56	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	60.2%	29 – 112	11/18/2024 19:56	
Fluoranthene-d10	93951-69-0	72.3%	45 – 130	11/18/2024 19:56	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:21	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A

Results

Client Sample ID	MW-45	Collected	11/11/2024 13:15
Lab Sample ID	3387075012	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:21	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:21	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:21	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:21	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.8%	62 – 133	11/22/2024 22:21	
4-Bromofluorobenzene	460-00-4	101%	79 – 114	11/22/2024 22:21	
Dibromofluoromethane	1868-53-7	97.3%	78 – 116	11/22/2024 22:21	
Toluene-d8	2037-26-5	104%	76 – 127	11/22/2024 22:21	

Results

Client Sample ID	MW-24D	Collected	11/11/2024 13:30
Lab Sample ID	3387075013	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	160		ug/L	20.0	SW846 8270E SIM	20	11/19/2024 15:29	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	0*%	29 – 112	11/19/2024 15:29	1
2-Methylnapthalene-d10	7297-45-2	69.7%	29 – 112	11/18/2024 20:24	
Fluoranthene-d10	93951-69-0	0*%	45 – 130	11/19/2024 15:29	2
Fluoranthene-d10	93951-69-0	85.8%	45 – 130	11/18/2024 20:24	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1,1-Trichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1,2,2-Tetrachloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1,2-Trichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloroethane	73.8		ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloroethene	947		ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,1-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,3-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,3-Trichloropropane	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2,4-Trichlorobenzene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dibromo-3-chloropropane	70.0 U	U	ug/L	70.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dibromoethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,3-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,3-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
1,4-Dichlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
2,2-Dichloropropane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
2-Butanone	100 U	U	ug/L	100	SW846 8260D	10	11/23/2024 01:20	BST	A
2-Hexanone	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
4-Methyl-2-Pentanone(MIBK)	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Acetone	100 U	U	ug/L	100	SW846 8260D	10	11/23/2024 01:20	BST	A
Benzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromochloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromodichloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromoform	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Bromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Carbon Tetrachloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chlorobenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chlorodibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chloroethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A

Results

Client Sample ID	MW-24D	Collected	11/11/2024 13:30
Lab Sample ID	3387075013	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Chloromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
cis-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
cis-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Dibromomethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Dichlorodifluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Diisopropyl ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Ethylbenzene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Hexachlorobutadiene	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Methyl t-Butyl Ether	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Methylene Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
mp-Xylene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Naphthalene	20.0 U	U	ug/L	20.0	SW846 8260D	10	11/23/2024 01:20	BST	A
o-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
o-Xylene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
p-Chlorotoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
p-Isopropyltoluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Styrene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Tetrachloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Toluene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Total Xylenes	30.0 U	U	ug/L	30.0	SW846 8260D	10	11/23/2024 01:20	BST	A
trans-1,2-Dichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
trans-1,3-Dichloropropene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Trichloroethene	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Trichlorofluoromethane	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Vinyl Acetate	50.0 U	U	ug/L	50.0	SW846 8260D	10	11/23/2024 01:20	BST	A
Vinyl Chloride	10.0 U	U	ug/L	10.0	SW846 8260D	10	11/23/2024 01:20	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	62 – 133	11/23/2024 01:20	
4-Bromofluorobenzene	460-00-4	103%	79 – 114	11/23/2024 01:20	
Dibromofluoromethane	1868-53-7	99.6%	78 – 116	11/23/2024 01:20	
Toluene-d8	2037-26-5	104%	76 – 127	11/23/2024 01:20	

Results

Client Sample ID	Trip Blank E	Collected	11/11/2024 13:30
Lab Sample ID	3387075014	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:22	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 19:22	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A

Results

Client Sample ID	Trip Blank E	Collected	11/11/2024 13:30
Lab Sample ID	3387075014	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 19:22	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 19:22	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 19:22	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	62 – 133	11/22/2024 19:22	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	11/22/2024 19:22	
Dibromofluoromethane	1868-53-7	102%	78 – 116	11/22/2024 19:22	
Toluene-d8	2037-26-5	107%	76 – 127	11/22/2024 19:22	

Results

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	26.8		ug/L	10.0	SW846 8270E SIM	10	11/19/2024 15:02	S7M	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	63.7%	29 – 112	11/18/2024 20:51	
2-Methylnapthalene-d10	7297-45-2	63.4%	29 – 112	11/19/2024 15:02	
Fluoranthene-d10	93951-69-0	76.1%	45 – 130	11/18/2024 20:51	
Fluoranthene-d10	93951-69-0	72.6%	45 – 130	11/19/2024 15:02	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1,1-Trichloroethane	1.2		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloroethane	7.4		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloroethene	36.5		ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:41	BST	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A

Results

Client Sample ID	MW-46D	Collected	11/10/2024 17:10
Lab Sample ID	3387075015	Lab Receipt	11/11/2024 17:33

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	11/22/2024 22:41	BST	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	11/22/2024 22:41	BST	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	11/22/2024 22:41	BST	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	11/22/2024 22:41	BST	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	93.9%	62 – 133	11/22/2024 22:41	
4-Bromofluorobenzene	460-00-4	100%	79 – 114	11/22/2024 22:41	
Dibromofluoromethane	1868-53-7	94%	78 – 116	11/22/2024 22:41	
Toluene-d8	2037-26-5	100%	76 – 127	11/22/2024 22:41	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3387075001	MW-35D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075002	MW-34D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075003	MW-33-295	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075004	MW-33-235	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075005	MW-30D-413	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075006	MW-30D-273	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075007	MW-29D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075008	MW-32D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075009	Trip Blank D	SW846 8260D	N/A	
3387075010	MW-28D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075011	MW-36D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075012	MW-45	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075013	MW-24D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	
3387075014	Trip Blank E	SW846 8260D	N/A	
3387075015	MW-46D	SW846 8270E SIM SW846 8260D	SW846 3510C N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1332545	Prep Method	SW846 3510C
Date	11/15/2024 08:20	Analysis Method	SW846 8270E SIM
Tech.	DEC		

Associated Samples

3387075001	3387075002	3387075011	3387075003
3387075012	3387075004	3387075013	3387075005
3387075006	3387075015	3387075007	3387075008
3387075010			

Method Blank 3905826 (MB) Created on 11/15/2024 06:47 For QC Batch 1332545

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.54	1	54.4	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.78	1	77.6	45 - 130	

Lab Control Standard 3905827 (LCS) Created on 11/15/2024 06:47 For QC Batch 1332545

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.48		1	47.8	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.47	1	47.4	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.67	1	66.9	45 - 130	

Matrix Spike 3905828 (MS) 3387075001 For QC Batch 1332545

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	MS	0.68	0	1	68	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	MS	0.7	1	70.5	29 - 112	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
Fluoranthene-d10	93951-69-0	MS	0.87	1	87.3	45 - 130	

Duplicate 3905829 (DUP) 3387075003 For QC Batch 1332545

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)			Qualifiers
1,4-Dioxane	123-91-1	DUP	3.7262	3.8990	RPD	4.53 (Max-30)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.53	1	53.2	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	0.69	1	68.9	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1337882	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3387075001 3387075002

Matrix Spike 3905935 (MS) 3387069014 (non-Project Sample) For QC Batch 1337882

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3905936 (MSD) 3387069014 (non-Project Sample) For QC Batch 1337882

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.8	0	20	114	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.9	0	20	114	78 - 121	RPD 0.40 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	24.9	2	20	114	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	24.7	2	20	114	66 - 130	RPD 0.64 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.5	0	20	113	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	22.7	0	20	114	74 - 135	RPD 0.84 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	22.9	0	20	114	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	23	0	20	115	82 - 126	RPD 0.37 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	23.9	1.60	20	111	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	23.4	1.60	20	109	78 - 124	RPD 2.10 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	23.8	2	20	109	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	23.3	2	20	107	63 - 128	RPD 1.98 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	21.7	0	20	109	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	21.5	0	20	107	76 - 126	RPD 1.22 (Max-16)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.1	0	20	101	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.1	0	20	101	61 - 126	RPD 0.09 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	21.6	0	20	108	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	22.4	0	20	112	75 - 132	RPD 3.29 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	23	0	20	115	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	23.1	0	20	116	67 - 123	RPD 0.62 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	19.9	0	20	99.5	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19.8	0	20	99.2	59 - 133	RPD 0.31 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	22.9	0	20	115	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	22.5	0	20	113	80 - 124	RPD 1.74 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	21.8	0	20	109	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.3	0	20	107	82 - 118	RPD 2.33 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	20.9	0	20	104	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20.7	0	20	103	70 - 133	RPD 0.97 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.3	0	20	106	81 - 127	RPD 1.03 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	20.9	0	20	104	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	21	0	20	105	81 - 118	RPD 0.74 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	22.6	0	20	113	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	22.4	0	20	112	82 - 126	RPD 0.75 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	21.5	0	20	107	81 - 116		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MSD	20.9	0	20	104	81 - 116	RPD 2.93 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	24	0	20	120	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	24.1	0	20	120	64 - 129	RPD 0.20 (Max-18)	
2-Butanone	78-93-3	MS	108	0	100	108	50 - 152		
2-Butanone	78-93-3	MSD	104	0	100	104	50 - 152	RPD 3.42 (Max-16)	
2-Hexanone	591-78-6	MS	107	0	100	107	65 - 154		
2-Hexanone	591-78-6	MSD	106	0	100	106	65 - 154	RPD 1.06 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	107	0	100	107	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	71 - 146	RPD 0.52 (Max-16)	
Acetone	67-64-1	MS	93.2	0	100	93.2	40 - 151		
Acetone	67-64-1	MSD	91.2	0	100	91.2	40 - 151	RPD 2.11 (Max-40)	
Benzene	71-43-2	MS	21.9	0	20	110	80 - 124		
Benzene	71-43-2	MSD	21.6	0	20	108	80 - 124	RPD 1.35 (Max-26)	
Bromobenzene	108-86-1	MS	21.9	0	20	110	81 - 119		
Bromobenzene	108-86-1	MSD	21.7	0	20	109	81 - 119	RPD 0.87 (Max-17)	
Bromochloromethane	74-97-5	MS	23.2	0	20	116	73 - 117		
Bromochloromethane	74-97-5	MSD	22.6	0	20	113	73 - 117	RPD 2.66 (Max-19)	
Bromodichloromethane	75-27-4	MS	22.9	0	20	114	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 126	RPD 1.22 (Max-16)	
Bromoform	75-25-2	MS	17.9	0	20	89.5	70 - 123		
Bromoform	75-25-2	MSD	18	0	20	89.9	70 - 123	RPD 0.44 (Max-16)	
Bromomethane	74-83-9	MS	15.4	0	20	77.1	45 - 148		
Bromomethane	74-83-9	MSD	15.4	0	20	76.9	45 - 148	RPD 0.30 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	20.1	0	20	101	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	20.2	0	20	101	62 - 132	RPD 0.19 (Max-17)	
Chlorobenzene	108-90-7	MS	22.5	0	20	112	85 - 117		
Chlorobenzene	108-90-7	MSD	22.2	0	20	111	85 - 117	RPD 1.14 (Max-15)	
Chlorodibromomethane	124-48-1	MS	19.1	0	20	95.3	77 - 122		
Chlorodibromomethane	124-48-1	MSD	19	0	20	95.1	77 - 122	RPD 0.20 (Max-15)	
Chloroethane	75-00-3	MS	21.8	0	20	109	51 - 142		
Chloroethane	75-00-3	MSD	20.2	0	20	101	51 - 142	RPD 7.66 (Max-24)	
Chloroform	67-66-3	MS	21.9	0.50	20	107	78 - 122		
Chloroform	67-66-3	MSD	21.4	0.50	20	104	78 - 122	RPD 2.66 (Max-16)	
Chloromethane	74-87-3	MS	21.5	0	20	107	38 - 156		
Chloromethane	74-87-3	MSD	20.2	0	20	101	38 - 156	RPD 5.95 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	22	0	20	110	78 - 125		
cis-1,2-Dichloroethene	156-59-2	MSD	21.9	0	20	109	78 - 125	RPD 0.65 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	22.6	0	20	113	81 - 121		
cis-1,3-Dichloropropene	10061-01-5	MSD	22.6	0	20	113	81 - 121	RPD 0.04 (Max-16)	
Dibromomethane	74-95-3	MS	21.8	0	20	109	81 - 125		
Dibromomethane	74-95-3	MSD	21.8	0	20	109	81 - 125	RPD 0.01 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	19.4	0	20	97.1	17 - 166		
Dichlorodifluoromethane	75-71-8	MSD	17.7	0	20	88.6	17 - 166	RPD 9.21 (Max-24)	
Diisopropyl ether	108-20-3	MS	21.5	0	20	108	74 - 131		
Diisopropyl ether	108-20-3	MSD	21.4	0	20	107	74 - 131	RPD 0.67 (Max-15)	
Ethylbenzene	100-41-4	MS	22.7	0	20	114	80 - 124		
Ethylbenzene	100-41-4	MSD	22.9	0	20	114	80 - 124	RPD 0.76 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	20.6	0	20	103	55 - 128		
Hexachlorobutadiene	87-68-3	MSD	22.2	0	20	111	55 - 128	RPD 7.61 (Max-35)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl t-Butyl Ether	1634-04-4	MS	21.9	0	20	110	69 - 115		
Methyl t-Butyl Ether	1634-04-4	MSD	21.7	0	20	109	69 - 115	RPD 1.07 (Max-20)	
Methylene Chloride	75-09-2	MS	21.8	0	20	109	76 - 121		
Methylene Chloride	75-09-2	MSD	21.4	0	20	107	76 - 121	RPD 1.99 (Max-17)	
mp-Xylene	108383/106423	MS	45.4	0	40	114	79 - 125		
mp-Xylene	108383/106423	MSD	45.3	0	40	113	79 - 125	RPD 0.28 (Max-21)	
Naphthalene	91-20-3	MS	18.3	0	20	91.7	56 - 134		
Naphthalene	91-20-3	MSD	18.8	0	20	93.9	56 - 134	RPD 2.39 (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.8	0	20	109	78 - 126		
o-Chlorotoluene	95-49-8	MSD	21.9	0	20	109	78 - 126	RPD 0.04 (Max-17)	
o-Xylene	95-47-6	MS	22.4	0	20	112	79 - 124		
o-Xylene	95-47-6	MSD	22.1	0	20	111	79 - 124	RPD 1.17 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.6	0	20	108	78 - 125		
p-Chlorotoluene	106-43-4	MSD	21.8	0	20	109	78 - 125	RPD 1.07 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	21.6	0	20	108	72 - 123		
p-Isopropyltoluene	99-87-6	MSD	22.1	0	20	111	72 - 123	RPD 2.65 (Max-17)	
Styrene	100-42-5	MS	23.3	0	20	117	79 - 123		
Styrene	100-42-5	MSD	23.4	0	20	117	79 - 123	RPD 0.34 (Max-16)	
Tetrachloroethene	127-18-4	MS	19.2	0	20	95.8	72 - 124		
Tetrachloroethene	127-18-4	MSD	19.6	0	20	97.9	72 - 124	RPD 2.20 (Max-38)	
Toluene	108-88-3	MS	22.2	0	20	111	80 - 125		
Toluene	108-88-3	MSD	22.2	0	20	111	80 - 125	RPD 0.32 (Max-20)	
Total Xylenes	1330-20-7	MS	67.8	0	60	113	79 - 125		
Total Xylenes	1330-20-7	MSD	67.5	0	60	112	79 - 125	RPD 0.57 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.9	0	20	110	71 - 122		
trans-1,2-Dichloroethene	156-60-5	MSD	21.6	0	20	108	71 - 122	RPD 1.31 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	20.6	0	20	103	78 - 126		
trans-1,3-Dichloropropene	10061-02-6	MSD	20.5	0	20	103	78 - 126	RPD 0.32 (Max-18)	
Trichloroethene	79-01-6	MS	21.5	0	20	108	77 - 124		
Trichloroethene	79-01-6	MSD	21.2	0	20	106	77 - 124	RPD 1.37 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	22	0	20	110	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	19.9	0	20	99.4	38 - 123	RPD 10.30 (Max-23)	
Vinyl Acetate	108-05-4	MS	19.3	0	20	96.5	58 - 136		
Vinyl Acetate	108-05-4	MSD	18.7	0	20	93.5	58 - 136	RPD 3.16 (Max-17)	
Vinyl Chloride	75-01-4	MS	22.3	0	20	111	27 - 138		
Vinyl Chloride	75-01-4	MSD	20.6	0	20	103	27 - 138	RPD 7.63 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.7	30	106	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.8	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.3	30	101	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.7	30	98.9	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.4	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	29.9	30	99.7	78 - 116	
Toluene-d8	2037-26-5	MS	30.2	30	101	76 - 127	
Toluene-d8	2037-26-5	MSD	30	30	99.9	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3909072 (MB) Created on 11/22/2024 10:43 For QC Batch 1337882

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.9	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.7	30	99.1	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29	30	96.6	78 - 116	
Toluene-d8	2037-26-5	BLK	30	30	99.9	76 - 127	

Lab Control Standard 3909073 (LCS) Created on 11/22/2024 10:43 For QC Batch 1337882

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	22.5		20	112	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.6		20	108	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.4		20	107	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.7		20	109	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.8		20	104	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.2		20	101	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	21		20	105	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	20.3		20	102	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.7		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.8		20	119	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	19		20	95.1	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.9		20	109	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	21.8		20	109	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.3		20	102	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.2		20	106	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21.4		20	107	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	LCS	21.1		20	106	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	23.3		20	116	64 - 129		
2-Butanone	78-93-3	LCS	107		100	107	50 - 152		
2-Hexanone	591-78-6	LCS	97.5		100	97.5	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	91.7		100	91.7	71 - 146		
Acetone	67-64-1	LCS	115		100	115	40 - 151		
Benzene	71-43-2	LCS	20.9		20	105	80 - 124		
Bromobenzene	108-86-1	LCS	21.9		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS	22.7		20	113	73 - 117		
Bromodichloromethane	75-27-4	LCS	22.2		20	111	79 - 126		
Bromoform	75-25-2	LCS	17.8		20	89	70 - 123		
Bromomethane	74-83-9	LCS	16.9		20	84.4	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	19.7		20	98.6	62 - 132		
Chlorobenzene	108-90-7	LCS	21.6		20	108	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19		20	95	77 - 122		
Chloroethane	75-00-3	LCS	20.8		20	104	51 - 142		
Chloroform	67-66-3	LCS	20.6		20	103	78 - 122		
Chloromethane	74-87-3	LCS	20.2		20	101	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	21.1		20	106	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	22.1		20	111	81 - 121		
Dibromomethane	74-95-3	LCS	20.8		20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	19.6		20	97.9	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.8		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	21.8		20	109	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.6		20	113	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.1		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	20.9		20	105	76 - 121		
mp-Xylene	108383/106423	LCS	44.3		40	111	79 - 125		
Naphthalene	91-20-3	LCS	18.1		20	90.5	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.9		20	109	78 - 126		
o-Xylene	95-47-6	LCS	22		20	110	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.6		20	108	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	22		20	110	72 - 123		
Styrene	100-42-5	LCS	23.3		20	117	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.2		20	101	72 - 124		
Toluene	108-88-3	LCS	21.2		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	66.3		60	111	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.8		20	104	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	20.1		20	101	78 - 126		
Trichloroethene	79-01-6	LCS	20.6		20	103	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	21.8		20	109	38 - 123		
Vinyl Acetate	108-05-4	LCS	18.2		20	91.1	58 - 136		
Vinyl Chloride	75-01-4	LCS	21.6		20	108	27 - 138		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.1	30	97.1	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	30.1	30	100	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.8	30	99.5	78 - 116	
Toluene-d8	2037-26-5	LCS	29.6	30	98.7	76 - 127	

QC Batch

QC Batch	1338207	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3387075010	3387075011	3387075003	3387075012
3387075004	3387075013	3387075005	3387075014
3387075009	3387075015	3387075006	3387075007
3387075008			

Method Blank 3909301 (MB) Created on 11/22/2024 17:46 For QC Batch 1338207

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	28.9	30	96.3	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	30.2	30	101	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.7	30	99.1	78 - 116	
Toluene-d8	2037-26-5	BLK	30.9	30	103	76 - 127	

Lab Control Standard 3909302 (LCS) Created on 11/22/2024 17:46 For QC Batch 1338207

RESULTS

Compound	CAS No	Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.7		20	108	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	19.7		20	98.3	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.7		20	108	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.2		20	106	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.6		20	98.2	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	19.3		20	96.4	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	19.1		20	95.4	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.6		20	108	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	21.2		20	106	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.9		20	119	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.9		20	105	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	19.6		20	97.9	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	21.4		20	107	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	20.7		20	104	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.9		20	105	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.5		20	107	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	20.5		20	102	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21.7		20	108	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.1		20	106	64 - 129		
2-Butanone	78-93-3	LCS	110		100	110	50 - 152		
2-Hexanone	591-78-6	LCS	112		100	112	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	103		100	103	71 - 146		
Acetone	67-64-1	LCS	121		100	121	40 - 151		
Benzene	71-43-2	LCS	19.8		20	98.9	80 - 124		
Bromobenzene	108-86-1	LCS	21		20	105	81 - 119		
Bromochloromethane	74-97-5	LCS	22		20	110	73 - 117		
Bromodichloromethane	75-27-4	LCS	22.1		20	111	79 - 126		
Bromoform	75-25-2	LCS	17.8		20	89	70 - 123		
Bromomethane	74-83-9	LCS	19.7		20	98.5	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	18		20	90.1	62 - 132		
Chlorobenzene	108-90-7	LCS	20.3		20	102	85 - 117		
Chlorodibromomethane	124-48-1	LCS	21.1		20	105	77 - 122		
Chloroethane	75-00-3	LCS	21.7		20	108	51 - 142		
Chloroform	67-66-3	LCS	20.5		20	102	78 - 122		
Chloromethane	74-87-3	LCS	19.6		20	98.2	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.4		20	102	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	20.7		20	104	81 - 121		
Dibromomethane	74-95-3	LCS	20.5		20	103	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	17		20	85.2	17 - 166		
Diisopropyl ether	108-20-3	LCS	21.7		20	109	74 - 131		
Ethylbenzene	100-41-4	LCS	20.2		20	101	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	22.6		20	113	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.6		20	108	69 - 115		
Methylene Chloride	75-09-2	LCS	20.6		20	103	76 - 121		
mp-Xylene	108383/106423	LCS	41.5		40	104	79 - 125		
Naphthalene	91-20-3	LCS	19.2		20	96.1	56 - 134		
o-Chlorotoluene	95-49-8	LCS	21.7		20	109	78 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
o-Xylene	95-47-6	LCS	20.1		20	101	79 - 124		
p-Chlorotoluene	106-43-4	LCS	21.9		20	109	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.7		20	108	72 - 123		
Styrene	100-42-5	LCS	21.8		20	109	79 - 123		
Tetrachloroethene	127-18-4	LCS	16.9		20	84.6	72 - 124		
Toluene	108-88-3	LCS	20.1		20	100	80 - 125		
Total Xylenes	1330-20-7	LCS	61.6		60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.2		20	101	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	18.4		20	91.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.2		20	95.9	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	18.7		20	93.5	38 - 123		
Vinyl Acetate	108-05-4	LCS	17.7		20	88.7	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.2		20	91.1	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.1	30	96.9	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	28.3	30	94.3	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.5	30	95.1	78 - 116	
Toluene-d8	2037-26-5	LCS	28.7	30	95.5	76 - 127	

Matrix Spike 3909303 (MS) 3387075011 For QC Batch 1338207

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3909304 (MSD) 3387075011 For QC Batch 1338207

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	21.7	0	20	109	78 - 121		
1,1,1,2-Tetrachloroethane	630-20-6	MSD	22.2	0	20	111	78 - 121	RPD 2.22 (Max-16)	
1,1,1-Trichloroethane	71-55-6	MS	22.8	0	20	114	66 - 130		
1,1,1-Trichloroethane	71-55-6	MSD	22.8	0	20	114	66 - 130	RPD 0.09 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.1	0	20	100	74 - 135		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.2	0	20	106	74 - 135	RPD 5.45 (Max-16)	
1,1,2-Trichloroethane	79-00-5	MS	20.7	0	20	103	82 - 126		
1,1,2-Trichloroethane	79-00-5	MSD	20.9	0	20	105	82 - 126	RPD 1.13 (Max-15)	
1,1-Dichloroethane	75-34-3	MS	21.4	0	20	107	78 - 124		
1,1-Dichloroethane	75-34-3	MSD	21	0	20	105	78 - 124	RPD 1.48 (Max-15)	
1,1-Dichloroethene	75-35-4	MS	22.4	0	20	112	63 - 128		
1,1-Dichloroethene	75-35-4	MSD	22.5	0	20	113	63 - 128	RPD 0.42 (Max-21)	
1,1-Dichloropropene	563-58-6	MS	22.4	0	20	112	76 - 126		
1,1-Dichloropropene	563-58-6	MSD	22.3	0	20	112	76 - 126	RPD 0.06 (Max-16)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,2,3-Trichlorobenzene	87-61-6	MS	20.9	0	20	105	61 - 126		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.8	0	20	109	61 - 126	RPD 4.04 (Max-36)	
1,2,3-Trichloropropane	96-18-4	MS	19.7	0	20	98.3	75 - 132		
1,2,3-Trichloropropane	96-18-4	MSD	20.3	0	20	102	75 - 132	RPD 3.35 (Max-19)	
1,2,4-Trichlorobenzene	120-82-1	MS	23.2	0	20	116	67 - 123		
1,2,4-Trichlorobenzene	120-82-1	MSD	23.9	0	20	120	67 - 123	RPD 3.05 (Max-22)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	18.5	0	20	92.4	59 - 133		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19.3	0	20	96.4	59 - 133	RPD 4.20 (Max-26)	
1,2-Dibromoethane	106-93-4	MS	19.3	0	20	96.6	80 - 124		
1,2-Dibromoethane	106-93-4	MSD	19.3	0	20	96.3	80 - 124	RPD 0.34 (Max-19)	
1,2-Dichlorobenzene	95-50-1	MS	21	0	20	105	82 - 118		
1,2-Dichlorobenzene	95-50-1	MSD	21.7	0	20	109	82 - 118	RPD 3.27 (Max-15)	
1,2-Dichloroethane	107-06-2	MS	20.2	0	20	101	70 - 133		
1,2-Dichloroethane	107-06-2	MSD	20	0	20	100	70 - 133	RPD 0.74 (Max-19)	
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	81 - 127		
1,2-Dichloropropane	78-87-5	MSD	21.5	0	20	108	81 - 127	RPD 0.31 (Max-15)	
1,3-Dichlorobenzene	541-73-1	MS	21.1	0	20	106	81 - 118		
1,3-Dichlorobenzene	541-73-1	MSD	22.1	0	20	111	81 - 118	RPD 4.65 (Max-16)	
1,3-Dichloropropane	142-28-9	MS	20.4	0	20	102	82 - 126		
1,3-Dichloropropane	142-28-9	MSD	20.1	0	20	101	82 - 126	RPD 1.49 (Max-15)	
1,4-Dichlorobenzene	106-46-7	MS	21.3	0	20	107	81 - 116		
1,4-Dichlorobenzene	106-46-7	MSD	22	0	20	110	81 - 116	RPD 2.92 (Max-15)	
2,2-Dichloropropane	594-20-7	MS	20.1	0	20	101	64 - 129		
2,2-Dichloropropane	594-20-7	MSD	19.9	0	20	99.3	64 - 129	RPD 1.33 (Max-18)	
2-Butanone	78-93-3	MS	82.4	0	100	82.4	50 - 152		
2-Butanone	78-93-3	MSD	92.2	0	100	92.2	50 - 152	RPD 11.20 (Max-16)	
2-Hexanone	591-78-6	MS	90.1	0	100	90.1	65 - 154		
2-Hexanone	591-78-6	MSD	91.3	0	100	91.3	65 - 154	RPD 1.29 (Max-17)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	90.1	0	100	90.1	71 - 146		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	91	0	100	91	71 - 146	RPD 0.97 (Max-16)	
Acetone	67-64-1	MS	81.8	0	100	81.8	40 - 151		
Acetone	67-64-1	MSD	80.4	0	100	80.4	40 - 151	RPD 1.76 (Max-40)	
Benzene	71-43-2	MS	21.6	0	20	108	80 - 124		
Benzene	71-43-2	MSD	21.6	0	20	108	80 - 124	RPD 0.39 (Max-26)	
Bromobenzene	108-86-1	MS	21.1	0	20	106	81 - 119		
Bromobenzene	108-86-1	MSD	21.9	0	20	109	81 - 119	RPD 3.49 (Max-17)	
Bromochloromethane	74-97-5	MS	22.6	0	20	113	73 - 117		
Bromochloromethane	74-97-5	MSD	22.8	0	20	114	73 - 117	RPD 0.58 (Max-19)	
Bromodichloromethane	75-27-4	MS	22.4	0	20	112	79 - 126		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 126	RPD 0.66 (Max-16)	
Bromoform	75-25-2	MS	16.8	0	20	84.2	70 - 123		
Bromoform	75-25-2	MSD	17.3	0	20	86.6	70 - 123	RPD 2.80 (Max-16)	
Bromomethane	74-83-9	MS	22.1	0	20	110	45 - 148		
Bromomethane	74-83-9	MSD	23.4	0	20	117	45 - 148	RPD 6 (Max-26)	
Carbon Tetrachloride	56-23-5	MS	22.7	0	20	114	62 - 132		
Carbon Tetrachloride	56-23-5	MSD	21.4	0	20	107	62 - 132	RPD 6.11 (Max-17)	
Chlorobenzene	108-90-7	MS	21.2	0	20	106	85 - 117		
Chlorobenzene	108-90-7	MSD	21.4	0	20	107	85 - 117	RPD 1.16 (Max-15)	
Chlorodibromomethane	124-48-1	MS	21.1	0	20	105	77 - 122		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)		Qualifiers
Chlorodibromomethane	124-48-1	MSD	20.8	0	20	104	77 - 122	RPD	1.27 (Max-15)	
Chloroethane	75-00-3	MS	24.7	0	20	124	51 - 142			
Chloroethane	75-00-3	MSD	24.7	0	20	124	51 - 142	RPD	0.15 (Max-24)	
Chloroform	67-66-3	MS	21.6	0	20	108	78 - 122			
Chloroform	67-66-3	MSD	21.6	0	20	108	78 - 122	RPD	0.30 (Max-16)	
Chloromethane	74-87-3	MS	20.5	0	20	103	38 - 156			
Chloromethane	74-87-3	MSD	20.8	0	20	104	38 - 156	RPD	1.08 (Max-27)	
cis-1,2-Dichloroethene	156-59-2	MS	21.5	0	20	107	78 - 125			
cis-1,2-Dichloroethene	156-59-2	MSD	21.7	0	20	108	78 - 125	RPD	1.02 (Max-21)	
cis-1,3-Dichloropropene	10061-01-5	MS	20.2	0	20	101	81 - 121			
cis-1,3-Dichloropropene	10061-01-5	MSD	20.4	0	20	102	81 - 121	RPD	0.91 (Max-16)	
Dibromomethane	74-95-3	MS	20.8	0	20	104	81 - 125			
Dibromomethane	74-95-3	MSD	21	0	20	105	81 - 125	RPD	0.78 (Max-16)	
Dichlorodifluoromethane	75-71-8	MS	21.6	0	20	108	17 - 166			
Dichlorodifluoromethane	75-71-8	MSD	22.3	0	20	111	17 - 166	RPD	3.05 (Max-24)	
Diisopropyl ether	108-20-3	MS	21.1	0	20	105	74 - 131			
Diisopropyl ether	108-20-3	MSD	20.7	0	20	103	74 - 131	RPD	1.74 (Max-15)	
Ethylbenzene	100-41-4	MS	21.5	0	20	108	80 - 124			
Ethylbenzene	100-41-4	MSD	22.1	0	20	110	80 - 124	RPD	2.43 (Max-19)	
Hexachlorobutadiene	87-68-3	MS	23.5	0	20	117	55 - 128			
Hexachlorobutadiene	87-68-3	MSD	25.4	0	20	127	55 - 128	RPD	7.75 (Max-35)	
Methyl t-Butyl Ether	1634-04-4	MS	20.7	0	20	103	69 - 115			
Methyl t-Butyl Ether	1634-04-4	MSD	20.9	0	20	105	69 - 115	RPD	1.32 (Max-20)	
Methylene Chloride	75-09-2	MS	21.3	0	20	106	76 - 121			
Methylene Chloride	75-09-2	MSD	21.6	0	20	108	76 - 121	RPD	1.25 (Max-17)	
mp-Xylene	108383/106423	MS	43.4	0	40	109	79 - 125			
mp-Xylene	108383/106423	MSD	44.3	0	40	111	79 - 125	RPD	2.05 (Max-21)	
Naphthalene	91-20-3	MS	18.3	0	20	91.6	56 - 134			
Naphthalene	91-20-3	MSD	19.1	0	20	95.3	56 - 134	RPD	4 (Max-40)	
o-Chlorotoluene	95-49-8	MS	21.6	0	20	108	78 - 126			
o-Chlorotoluene	95-49-8	MSD	22.3	0	20	112	78 - 126	RPD	3.36 (Max-17)	
o-Xylene	95-47-6	MS	21.2	0	20	106	79 - 124			
o-Xylene	95-47-6	MSD	21.5	0	20	108	79 - 124	RPD	1.34 (Max-19)	
p-Chlorotoluene	106-43-4	MS	21.6	0	20	108	78 - 125			
p-Chlorotoluene	106-43-4	MSD	22.3	0	20	111	78 - 125	RPD	3.25 (Max-16)	
p-Isopropyltoluene	99-87-6	MS	22.5	0	20	112	72 - 123			
p-Isopropyltoluene	99-87-6	MSD	23.2	0	20	116	72 - 123	RPD	2.94 (Max-17)	
Styrene	100-42-5	MS	21.6	0	20	108	79 - 123			
Styrene	100-42-5	MSD	22.2	0	20	111	79 - 123	RPD	2.62 (Max-16)	
Tetrachloroethene	127-18-4	MS	19.4	0	20	97.2	72 - 124			
Tetrachloroethene	127-18-4	MSD	19.3	0	20	96.7	72 - 124	RPD	0.53 (Max-38)	
Toluene	108-88-3	MS	21.5	0	20	107	80 - 125			
Toluene	108-88-3	MSD	21.8	0	20	109	80 - 125	RPD	1.33 (Max-20)	
Total Xylenes	1330-20-7	MS	64.7	0	60	108	79 - 125			
Total Xylenes	1330-20-7	MSD	65.9	0	60	110	79 - 125	RPD	1.82 (Max-35)	
trans-1,2-Dichloroethene	156-60-5	MS	21.6	0	20	108	71 - 122			
trans-1,2-Dichloroethene	156-60-5	MSD	21.2	0	20	106	71 - 122	RPD	1.90 (Max-22)	
trans-1,3-Dichloropropene	10061-02-6	MS	17.5	0	20	87.4	78 - 126			
trans-1,3-Dichloropropene	10061-02-6	MSD	17.6	0	20	87.9	78 - 126	RPD	0.56 (Max-18)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Trichloroethene	79-01-6	MS	21.4	0	20	107	77 - 124		
Trichloroethene	79-01-6	MSD	21.3	0	20	106	77 - 124	RPD 0.71 (Max-18)	
Trichlorofluoromethane	75-69-4	MS	23.7	0	20	118	38 - 123		
Trichlorofluoromethane	75-69-4	MSD	24	0	20	120	38 - 123	RPD 1.56 (Max-23)	
Vinyl Acetate	108-05-4	MS	14.6	0	20	73.1	58 - 136		
Vinyl Acetate	108-05-4	MSD	14.9	0	20	74.7	58 - 136	RPD 2.13 (Max-17)	
Vinyl Chloride	75-01-4	MS	22.1	0	20	110	27 - 138		
Vinyl Chloride	75-01-4	MSD	22.2	0	20	111	27 - 138	RPD 0.60 (Max-40)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	29.9	30	99.6	62 - 133	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.1	30	100	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	28.5	30	95.1	79 - 114	
4-Bromofluorobenzene	460-00-4	MSD	28.6	30	95.3	79 - 114	
Dibromofluoromethane	1868-53-7	MS	30.2	30	101	78 - 116	
Dibromofluoromethane	1868-53-7	MSD	30.5	30	102	78 - 116	
Toluene-d8	2037-26-5	MS	29.6	30	98.7	76 - 127	
Toluene-d8	2037-26-5	MSD	29.9	30	99.5	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3387075001	MW-35D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1337882
3387075002	MW-34D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1337882
3387075003	MW-33-295	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075004	MW-33-235	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075005	MW-30D-413	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1335342 1338207
3387075006	MW-30D-273	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075007	MW-29D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075008	MW-32D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075009	Trip Blank D	N/A	N/A	N/A		SW846 8260D	1338207
3387075010	MW-28D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075011	MW-36D	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075012	MW-45	SW846 3510C N/A	1332545 N/A	11/15/2024 08:20 N/A	DEC	SW846 8270E SIM SW846 8260D	1334510 1338207
3387075013	MW-24D	SW846 3510C SW846 3510C N/A	1332545 1332545 N/A	11/15/2024 08:20 11/15/2024 08:20 N/A	DEC DEC	SW846 8270E SIM SW846 8270E SIM SW846 8260D	1335342 1334510 1338207
3387075014	Trip Blank E	N/A	N/A	N/A		SW846 8260D	1338207
3387075015	MW-46D	SW846 3510C SW846 3510C N/A	1332545 1332545 N/A	11/15/2024 08:20 11/15/2024 08:20 N/A	DEC DEC	SW846 8270E SIM SW846 8270E SIM SW846 8260D	1334510 1335342 1338207

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 1 of
ALS Quote #:
3387075
Logged By: DIG
PM: SJB

Client Name: WSP USA
Address: 13530 Dulles Technology Dr. Suite 300 Herndon, VA
Contact: Eric Johnson
Phone#: (703) 709-5600
Project Name/#: Kop Flex - OFF site
Bill To:
Purchase Order #: P102840US001
TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] eric.johnson@wsp.com

	Container Type	Container Size	Preservative
	G	40mL	HCl
	A	250mL	UNP
	G	40mL	HCl

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCS 8260	1,4 dioxane 8270	TRIP VOCS							
1	MW-35D	11/11/24	0850		G	GW	3	2								
2	MW-34D	11/11/24	0910		G	GW	3	2								
3	MW-33-295	11/11/24	0940		G	GW	3	2								
4	MW-33-235	11/11/24	0950		G	GW	3	2								
5	MW-30D-413	11/11/24	1010		G	GW	3	2								
6	MW-30D-273	11/11/24	1025		G	GW	3	2								
7	MW-29D	11/11/24	1050		G	GW	3	2								
8	MW-32D	11/11/24	1115		G	GW	3	2								
9																
10	TRIP BLANK D								2							

Enter Number of C

Temp By: DB | WO Temp (°C): 2° | Therm ID: 565

Receipt Info Completed By:	DPB
Cooler Custody Seal Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Cooler & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
CR6 Samples Filtered	Y N NA
OP Samples Filtered	Y N NA
VOA Trip Blank	Y N NA
NJ≤ 4 Days?	Y N
Rad Screen (uCi)	
Courier/Tracking #:	
SDWA Compliance	Y N
PWSID	
WV Containers 0-6°C	Y N NA

Receipt Info completed by: _____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	
Courier/Tracking #			

Deviations? NO YES
If YES, list below:
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)_____
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin?_____ New Source Contact:
PWSID #__
PWS Contact:_____ PWS Phone #:_____

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
No Sample DB 11/11/24

extra set recd - see pg 2. 11/12/24
Contains Short Hold Testing YES (NO)
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11/11/24	3:25	1	[signature]	2	[signature] ALS 1525 11-11-24
11-11-24	1733	3	[signature] ALS	4	DAG/ALS
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 3387075 of
ALS Quote #:

Client Name: WSP USA
Address: 13530 Dulles Technology Dr. Suite 300 Herndon, VA
Contact: Eric Johnson
Phone#: (703) 709-5600
Project Name/#: KOPFLEX-OFF site
Bill To:
Purchase Order #: P102840 US001
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] eric.johnson@wsp.com

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs - 8260	1,4dioxane 8270D	VOCs-Trip blank							
Container Type							G	A	G							
Container Size							40mL	250mL	40mL							
Preservative							HCl	UNP	HCl	DG 11/11/24						
1	MW-28D	11/11/24	1145		G	GW	3	2								
2	MW-36D	11/11/24	1200		G	GW	3	2								
3	MW-45	11/11/24	1315		G	GW	3	2								
4	MW-24D	11/11/24	1330		G	GW	3	2								
5																
6																
7	MW-46D	11/10/24	1710		G	GW	3	2	*							
8																
9																
10	TRIPBLANK E								2							

Enter Number of Containers Per Sample or Field Results Below.

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11/11/24	3:25	1	[signature]	2	[signature] ALS 1525 11-11-24
11-11-24	1733	3	[signature] ALS	4	DAGLAIS
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by:_____ WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking #

Deviations? NO YES
If YES, list below.
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?_____
PWSID #__
PWS Contact:_____ PWS Phone #:_____
Rad Screen (uCi)_____
New Source? Y N
New Source Contact:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

*GJ 11-12-24
Contains Short Hold Testing YES (NO)
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [ ] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] ____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL ____ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **WSP USA Inc.**

Project	Kopflex Off Site
Workorder	3389731
Report ID	371908 on 12/5/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Nov 27, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
- Elliott Martynkiewicz - WSP USA Inc.
- Eric Johnson - WSP USA INC
- Erik Reinert - WSP USA Inc

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3389731001	MW-31D	Ground Water	11/26/2024 10:45	11/27/2024 09:30	CBC	Collected By Client
3389731002	MW-25-130	Ground Water	11/26/2024 11:30	11/27/2024 09:30	CBC	Collected By Client
3389731003	MW-200	Ground Water	11/26/2024 09:00	11/27/2024 09:30	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.

Detected Results Summary

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	21.4	ug/L	5.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	6.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	6.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	91.5	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.0	ug/L	1.0	SW846 8260D	#

Detected Results Summary

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	23.6	ug/L	5.4	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	5.8	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	6.7	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	88.9	ug/L	1.0	SW846 8260D	#
1,2-Dichloroethane	1.1	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-31D	Collected	11/26/2024 10:45
Lab Sample ID	3389731001	Lab Receipt	11/27/2024 09:30

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	1.0 U	U	ug/L	1.0	SW846 8270E SIM	1	12/04/2024 02:17	M1O	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	59.1%	29 – 112	12/04/2024 02:17	
Fluoranthene-d10	93951-69-0	78%	45 – 130	12/04/2024 02:17	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1,1-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A

Results

Client Sample ID	MW-31D	Collected	11/26/2024 10:45
Lab Sample ID	3389731001	Lab Receipt	11/27/2024 09:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 02:56	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 02:56	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	12/03/2024 02:56	
4-Bromofluorobenzene	460-00-4	113%	79 – 114	12/03/2024 02:56	
Dibromofluoromethane	1868-53-7	104%	78 – 116	12/03/2024 02:56	
Toluene-d8	2037-26-5	109%	76 – 127	12/03/2024 02:56	

Results

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	21.4		ug/L	5.4	SW846 8270E SIM	5	12/05/2024 03:23	M1O	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	57.4%	29 – 112	12/04/2024 02:44	
2-Methylnapthalene-d10	7297-45-2	52.8%	29 – 112	12/05/2024 03:23	
Fluoranthene-d10	93951-69-0	74.4%	45 – 130	12/04/2024 02:44	
Fluoranthene-d10	93951-69-0	69.7%	45 – 130	12/05/2024 03:23	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1,1-Trichloroethane	6.1		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloroethane	6.8		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloroethene	91.5		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichloroethane	1.0		ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A

Results

Client Sample ID	MW-25-130	Collected	11/26/2024 11:30
Lab Sample ID	3389731002	Lab Receipt	11/27/2024 09:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:16	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:16	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	62 – 133	12/03/2024 03:16	
4-Bromofluorobenzene	460-00-4	96.6%	79 – 114	12/03/2024 03:16	
Dibromofluoromethane	1868-53-7	100%	78 – 116	12/03/2024 03:16	
Toluene-d8	2037-26-5	104%	76 – 127	12/03/2024 03:16	

Results

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	23.6		ug/L	5.4	SW846 8270E SIM	5	12/05/2024 08:47	M1O	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	54.2%	29 – 112	12/04/2024 01:50	
2-Methylnapthalene-d10	7297-45-2	52.1%	29 – 112	12/05/2024 08:47	
Fluoranthene-d10	93951-69-0	76.7%	45 – 130	12/04/2024 01:50	
Fluoranthene-d10	93951-69-0	72.7%	45 – 130	12/05/2024 08:47	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1,1-Trichloroethane	5.8		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloroethane	6.7		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloroethene	88.9		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichloroethane	1.1		ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A

Results

Client Sample ID	MW-200	Collected	11/26/2024 09:00
Lab Sample ID	3389731003	Lab Receipt	11/27/2024 09:30

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Hexachlorobutadiene	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Methyl t-Butyl Ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/03/2024 03:36	PDK	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/03/2024 03:36	PDK	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	62 – 133	12/03/2024 03:36	
4-Bromofluorobenzene	460-00-4	102%	79 – 114	12/03/2024 03:36	
Dibromofluoromethane	1868-53-7	103%	78 – 116	12/03/2024 03:36	
Toluene-d8	2037-26-5	105%	76 – 127	12/03/2024 03:36	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3389731001	MW-31D	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3389731002	MW-25-130	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	
3389731003	MW-200	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1349696	Prep Method	SW846 3510C
Date	12/03/2024 08:45	Analysis Method	SW846 8270E SIM
Tech.	DEC		

Associated Samples

3389731002 3389731003 3389731001

Method Blank 3912416 (MB) Created on 12/03/2024 07:15 For QC Batch 1349696

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.59	1	59.5	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.78	1	77.6	45 - 130	

Lab Control Standard 3912417 (LCS) Created on 12/03/2024 07:15 For QC Batch 1349696

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.48		1	48.2	22 - 75		U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.58	1	58.3	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.8	1	80.2	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1349288	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3389731001 3389731002 3389731003

Duplicate 3912354 (DUP) 3389013005 (non-Project Sample) For QC Batch 1349288

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	DUP	0	0	RPD	0	(Max-)	U
1,1,1-Trichloroethane	71-55-6	DUP	0	0	RPD	0	(Max-)	U
1,1,2,2-Tetrachloroethane	79-34-5	DUP	0	0	RPD	0	(Max-)	U
1,1,2-Trichloroethane	79-00-5	DUP	0	0	RPD	0	(Max-)	U
1,1-Dichloroethane	75-34-3	DUP	0	0	RPD	0	(Max-)	U
1,1-Dichloroethene	75-35-4	DUP	0	0	RPD	0	(Max-)	U
1,1-Dichloropropene	563-58-6	DUP	0	0	RPD	0	(Max-)	U
1,2,3-Trichlorobenzene	87-61-6	DUP	0	0	RPD	0	(Max-)	U
1,2,3-Trichloropropane	96-18-4	DUP	0	0	RPD	0	(Max-)	U
1,2,4-Trichlorobenzene	120-82-1	DUP	0	0	RPD	0	(Max-)	U
1,2-Dibromo-3-chloropropane	96-12-8	DUP	0	0	RPD	0	(Max-)	U
1,2-Dibromoethane	106-93-4	DUP	0	0	RPD	0	(Max-)	U
1,2-Dichlorobenzene	95-50-1	DUP	0	0	RPD	0	(Max-)	U
1,2-Dichloroethane	107-06-2	DUP	0	0	RPD	0	(Max-)	U
1,2-Dichloropropane	78-87-5	DUP	0	0	RPD	0	(Max-)	U
1,3-Dichlorobenzene	541-73-1	DUP	0	0	RPD	0	(Max-)	U
1,3-Dichloropropane	142-28-9	DUP	0	0	RPD	0	(Max-)	U
1,4-Dichlorobenzene	106-46-7	DUP	0	0	RPD	0	(Max-)	U
2,2-Dichloropropane	594-20-7	DUP	0	0	RPD	0	(Max-)	U
2-Butanone	78-93-3	DUP	0	0	RPD	0	(Max-)	U
2-Hexanone	591-78-6	DUP	0	0	RPD	0	(Max-)	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	DUP	0	0	RPD	0	(Max-)	U
Acetone	67-64-1	DUP	0	0	RPD	0	(Max-)	U
Benzene	71-43-2	DUP	0	0	RPD	0	(Max-)	U
Bromobenzene	108-86-1	DUP	0	0	RPD	0	(Max-)	U
Bromochloromethane	74-97-5	DUP	0	0	RPD	0	(Max-)	U
Bromodichloromethane	75-27-4	DUP	0	0	RPD	0	(Max-)	U
Bromoform	75-25-2	DUP	0	0	RPD	0	(Max-)	U
Bromomethane	74-83-9	DUP	0	0	RPD	0	(Max-)	U
Carbon Tetrachloride	56-23-5	DUP	0	0	RPD	0	(Max-)	U
Chlorobenzene	108-90-7	DUP	0	0	RPD	0	(Max-)	U
Chlorodibromomethane	124-48-1	DUP	0	0	RPD	0	(Max-)	U
Chloroethane	75-00-3	DUP	0	0	RPD	0	(Max-)	U
Chloroform	67-66-3	DUP	4.9734	5.0609	RPD	1.74	(Max-)	
Chloromethane	74-87-3	DUP	0	0	RPD	0	(Max-)	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
cis-1,2-Dichloroethene	156-59-2	DUP	0	0	RPD	0	(Max-)	U
cis-1,3-Dichloropropene	10061-01-5	DUP	0	0	RPD	0	(Max-)	U
Dibromomethane	74-95-3	DUP	0	0	RPD	0	(Max-)	U
Dichlorodifluoromethane	75-71-8	DUP	0	0	RPD	0	(Max-)	U
Diisopropyl ether	108-20-3	DUP	0	0	RPD	0	(Max-)	U
Ethylbenzene	100-41-4	DUP	0	0	RPD	0	(Max-)	U
Hexachlorobutadiene	87-68-3	DUP	0	0	RPD	0	(Max-)	U
Methyl t-Butyl Ether	1634-04-4	DUP	0	0	RPD	0	(Max-)	U
Methylene Chloride	75-09-2	DUP	0	0	RPD	0	(Max-)	U
mp-Xylene	108383/106423	DUP	0	0	RPD	0	(Max-)	U
Naphthalene	91-20-3	DUP	0.4292	0.5382	RPD	22.50	(Max-)	U
o-Chlorotoluene	95-49-8	DUP	0	0	RPD	0	(Max-)	U
o-Xylene	95-47-6	DUP	0	0	RPD	0	(Max-)	U
p-Chlorotoluene	106-43-4	DUP	0	0	RPD	0	(Max-)	U
p-Isopropyltoluene	99-87-6	DUP	0	0	RPD	0	(Max-)	U
Styrene	100-42-5	DUP	0	0	RPD	0	(Max-)	U
Tetrachloroethene	127-18-4	DUP	0	0	RPD	0	(Max-)	U
Toluene	108-88-3	DUP	0	0	RPD	0	(Max-)	U
Total Xylenes	1330-20-7	DUP	0	0	RPD	0	(Max-)	U
trans-1,2-Dichloroethene	156-60-5	DUP	0	0	RPD	0	(Max-)	U
trans-1,3-Dichloropropene	10061-02-6	DUP	0	0	RPD	0	(Max-)	U
Trichloroethene	79-01-6	DUP	0	0	RPD	0	(Max-)	U
Trichlorofluoromethane	75-69-4	DUP	0	0	RPD	0	(Max-)	U
Vinyl Acetate	108-05-4	DUP	0	0	RPD	0	(Max-)	U
Vinyl Chloride	75-01-4	DUP	0	0	RPD	0	(Max-)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	DUP	30.6	30	102	62 - 133	
4-Bromofluorobenzene	460-00-4	DUP	28.9	30	96.3	79 - 114	
Dibromofluoromethane	1868-53-7	DUP	30.5	30	102	78 - 116	
Toluene-d8	2037-26-5	DUP	30.6	30	102	76 - 127	

Matrix Spike 3912355 (MS) 3389013007 (non-Project Sample) For QC Batch 1349288

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	21.3	0	20	107	78 - 121		
1,1,1-Trichloroethane	71-55-6	MS	21.9	0	20	109	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.1	0	20	100	74 - 135		
1,1,2-Trichloroethane	79-00-5	MS	20.7	0	20	103	82 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloroethane	75-34-3	MS	20.5	0	20	102	78 - 124		
1,1-Dichloroethene	75-35-4	MS	21.4	0	20	107	63 - 128		
1,1-Dichloropropene	563-58-6	MS	20.9	0	20	105	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	MS	19.6	0	20	98.1	61 - 126		
1,2,3-Trichloropropane	96-18-4	MS	20.1	0	20	100	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	MS	21.1	0	20	106	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	MS	18.1	0	20	90.4	59 - 133		
1,2-Dibromoethane	106-93-4	MS	20.6	0	20	103	80 - 124		
1,2-Dichlorobenzene	95-50-1	MS	20	0	20	99.8	82 - 118		
1,2-Dichloroethane	107-06-2	MS	19.7	0	20	98.6	70 - 133		
1,2-Dichloropropane	78-87-5	MS	20.8	0	20	104	81 - 127		
1,3-Dichlorobenzene	541-73-1	MS	19.5	0	20	97.3	81 - 118		
1,3-Dichloropropane	142-28-9	MS	20.2	0	20	101	82 - 126		
1,4-Dichlorobenzene	106-46-7	MS	19.5	0	20	97.5	81 - 116		
2,2-Dichloropropane	594-20-7	MS	20.9	0	20	105	64 - 129		
2-Butanone	78-93-3	MS	89.2	0	100	89.2	50 - 152		
2-Hexanone	591-78-6	MS	88.2	0	100	88.2	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	91.9	0	100	91.9	71 - 146		
Acetone	67-64-1	MS	84.5	0	100	84.5	40 - 151		
Benzene	71-43-2	MS	20.8	0	20	104	80 - 124		
Bromobenzene	108-86-1	MS	20.2	0	20	101	81 - 119		
Bromochloromethane	74-97-5	MS	21.5	0	20	108	73 - 117		
Bromodichloromethane	75-27-4	MS	22	0	20	110	79 - 126		
Bromoform	75-25-2	MS	18.3	0	20	91.3	70 - 123		
Bromomethane	74-83-9	MS	15.3	0	20	76.5	45 - 148		
Carbon Tetrachloride	56-23-5	MS	19.2	0	20	96.2	62 - 132		
Chlorobenzene	108-90-7	MS	20.4	0	20	102	85 - 117		
Chlorodibromomethane	124-48-1	MS	18.4	0	20	91.9	77 - 122		
Chloroethane	75-00-3	MS	23.1	0	20	115	51 - 142		
Chloroform	67-66-3	MS	22.7	2.60	20	100	78 - 122		
Chloromethane	74-87-3	MS	19.1	0	20	95.3	38 - 156		
cis-1,2-Dichloroethene	156-59-2	MS	21	0	20	105	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	MS	17.7	0	20	88.3	81 - 121		
Dibromomethane	74-95-3	MS	20.7	0	20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	MS	16.6	0	20	82.9	17 - 166		
Diisopropyl ether	108-20-3	MS	20.6	0	20	103	74 - 131		
Ethylbenzene	100-41-4	MS	21.2	0	20	106	80 - 124		
Hexachlorobutadiene	87-68-3	MS	22.1	0	20	111	55 - 128		
Methyl t-Butyl Ether	1634-04-4	MS	20.5	0	20	103	69 - 115		
Methylene Chloride	75-09-2	MS	20.8	0	20	104	76 - 121		
mp-Xylene	108383/106423	MS	41.9	0	40	105	79 - 125		
Naphthalene	91-20-3	MS	18.1	0	20	90.7	56 - 134		
o-Chlorotoluene	95-49-8	MS	19.9	0	20	99.7	78 - 126		
o-Xylene	95-47-6	MS	21	0	20	105	79 - 124		
p-Chlorotoluene	106-43-4	MS	19.7	0	20	98.6	78 - 125		
p-Isopropyltoluene	99-87-6	MS	21.3	0	20	107	72 - 123		
Styrene	100-42-5	MS	17.7	0	20	88.6	79 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Tetrachloroethene	127-18-4	MS	19.5	0	20	97.5	72 - 124		
Toluene	108-88-3	MS	21.1	0	20	105	80 - 125		
Total Xylenes	1330-20-7	MS	62.8	0	60	105	79 - 125		
trans-1,2-Dichloroethene	156-60-5	MS	20.5	0	20	103	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	MS	17.7	0	20	88.4	78 - 126		
Trichloroethene	79-01-6	MS	20	0	20	100	77 - 124		
Trichlorofluoromethane	75-69-4	MS	23.3	0	20	117	38 - 123		
Vinyl Acetate	108-05-4	MS	17.7	0	20	88.6	58 - 136		
Vinyl Chloride	75-01-4	MS	21.6	0	20	108	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	32.3	30	108	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	30.6	30	102	79 - 114	
Dibromofluoromethane	1868-53-7	MS	32.2	30	107	78 - 116	
Toluene-d8	2037-26-5	MS	31.5	30	105	76 - 127	

Method Blank 3912348 (MB) Created on 12/02/2024 22:20 For QC Batch 1349288

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.8	30	99.5	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.4	30	97.9	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.5	30	98.2	78 - 116	
Toluene-d8	2037-26-5	BLK	29.9	30	99.6	76 - 127	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Lab Control Standard 3912349 (LCS) Created on 12/02/2024 22:20 For QC Batch 1349288

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	21.6		20	108	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21		20	105	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	22		20	110	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.5		20	107	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	19.9		20	99.3	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	20.1		20	101	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20		20	99.9	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.5		20	108	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	20.8		20	104	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.3		20	117	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20.4		20	102	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.1		20	106	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	20.9		20	104	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.4		20	97	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	102	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	20.4		20	102	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21		20	105	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	20.6		20	103	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	21.9		20	109	64 - 129		
2-Butanone	78-93-3	LCS	111		100	111	50 - 152		
2-Hexanone	591-78-6	LCS	105		100	105	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	100		100	100	71 - 146		
Acetone	67-64-1	LCS	132		100	132	40 - 151		
Benzene	71-43-2	LCS	19.8		20	99.2	80 - 124		
Bromobenzene	108-86-1	LCS	20.7		20	104	81 - 119		
Bromochloromethane	74-97-5	LCS	21.8		20	109	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.8		20	109	79 - 126		
Bromoform	75-25-2	LCS	20.4		20	102	70 - 123		
Bromomethane	74-83-9	LCS	16.2		20	80.9	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	17.8		20	88.9	62 - 132		
Chlorobenzene	108-90-7	LCS	20.4		20	102	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19		20	95	77 - 122		
Chloroethane	75-00-3	LCS	17.9		20	89.5	51 - 142		
Chloroform	67-66-3	LCS	19.6		20	98.1	78 - 122		
Chloromethane	74-87-3	LCS	17.2		20	85.9	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.3		20	101	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	18.6		20	92.8	81 - 121		
Dibromomethane	74-95-3	LCS	21.1		20	106	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	14.5		20	72.4	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.8		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	20.7		20	104	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	25		20	125	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	21.1		20	105	69 - 115		
Methylene Chloride	75-09-2	LCS	20.8		20	104	76 - 121		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
mp-Xylene	108383/106423	LCS	41.1		40	103	79 - 125		
Naphthalene	91-20-3	LCS	20.2		20	101	56 - 134		
o-Chlorotoluene	95-49-8	LCS	20.5		20	102	78 - 126		
o-Xylene	95-47-6	LCS	20.6		20	103	79 - 124		
p-Chlorotoluene	106-43-4	LCS	20.7		20	104	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	21.7		20	109	72 - 123		
Styrene	100-42-5	LCS	18.6		20	93	79 - 123		
Tetrachloroethene	127-18-4	LCS	19.5		20	97.7	72 - 124		
Toluene	108-88-3	LCS	20.6		20	103	80 - 125		
Total Xylenes	1330-20-7	LCS	61.8		60	103	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	19.6		20	97.9	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	18.8		20	93.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.2		20	96.1	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	19.4		20	96.8	38 - 123		
Vinyl Acetate	108-05-4	LCS	20.3		20	102	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.3		20	91.5	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.5	30	95	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.6	30	98.7	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.5	30	98.5	78 - 116	
Toluene-d8	2037-26-5	LCS	29.6	30	98.8	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3389731001	MW-31D	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		N/A	N/A	N/A		SW846 8260D	1349288
3389731002	MW-25-130	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1351113
		SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		N/A	N/A	N/A		SW846 8260D	1349288
3389731003	MW-200	SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1350390
		SW846 3510C	1349696	12/03/2024 08:45	DEC	SW846 8270E SIM	1351113
		N/A	N/A	N/A		SW846 8260D	1349288

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3389731
Logged By: CXW
PM: SJB
ALS Quote #:
of

Client Name: WSP USA
Address: 13530 Dulles Technology Dr. suite 300 Herndon, VA
Contact: Eric Johnson
Phone#: (703) 709-5600
Project Name/#: Kopflex OFF SITE
Bill To:
Purchase Order #: P102840 US001
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [X] eric.johnson@wsp.com

Container Type	AG	AG										
Container Size	40 ml	250 ml	DD 11/27/24									
Preservative	HCL	U NP										

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs - 8260	1,4 dioxane 8270								
1	MW-31D	11/26/24	1045		G	GW	3	2								
2	MW-25-130	11/26/24	1130		G	GW	3	2								
3	MW-200	11/26/24	0900		G	GW	3	2								
4																
5																
6																
7																
8																
9																
10																

Enter Number of Containers Per Sample or Field Results Below.

Receipt Information (completed by Receiving Lab)
Temp Taken By: DD Therm ID: 571 WO Temp (°C) 5°
Receipt Info completed by: DD
WV Containers 0-6°C Y N NA
Cooler Custody Seals Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Coolers & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA only: Trip Blank Y N NA
NJ ≤ 4 days? Y N
Courier/Tracking # 7702 5791 0865
Deviations? NO YES
If YES, list below
Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)_____
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin?_____ New Source Contact:
PWSID #__
PWS Contact:_____ PWS Phone #:_____

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
No Sampler
DD
11/27/24

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time	Relinquished By / Company Name		Received By / Company Name	
		1		2	FEDEX
		3	FEDEX	4	DD/AW 11/27/24 0930
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01 2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3389732
Logged By: CXW
PM: KLW
ALS Quote #:
of

Client Name: Dayton Superior
Address: 7130 Ambassador Drive Allentown, PA 18106
Contact: Troy Heiland
Phone#: 610-366-3890 x 47137
Project Name/#: Storm Water samples
Bill To: same
Purchase Order #: 348941
TAT: [x] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [x] troyheiland@daytonsuperior.com

Container Type	PL	AG	PL									
Container Size	500 mL	250 mL	125 mL									
Preservative	P	H_2SO_4	HNO_3									
ANALYSIS / METHOD REQUESTED	Ph TSS	O/G	Total Metals									

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Ph TSS	O/G	Total Metals							
1	Outfall #1	11/26/24	8:40am		G		1	1	1							
2	Outfall #2	11/26/24	8:43am		G		1	1	1							
3	Outfall #3	11/26/24	8:46am		G		1	1	1							
4																
5																
6																
7																
8																
9																
10																

Enter Number of Containers Per Sample or Field Results Below.

Circle Sample Collector: ALS Tech / Client
Name: Troy Heiland ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
11/26/24	14:30	1	Troy Heiland / Dayton Superior via UPS	2	UPS
		3		4	DD/ALS 11/27/24 0932
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)
Temp Taken By: DD Therm ID: 571 WO Temp (°C): 4°
Receipt Info completed by: DD WV Containers 0-6°C Y N NA
Cooler Custody Seals Intact Y N NA
Sample Custody Seal Intact Y N NA
Received on Ice Y N NA
Coolers & Samples Intact Y N
Correct Containers Provided Y N
Sample Label/COC Agree Y N
Adequate Sample Volumes Y N
VOA only: Trip Blank Y N NA
NJ ≤ 4 days? Y N
Courier/Tracking # 12W1496301 4323 0745
Deviations? NO YES
If YES, list below.
Client contact:
Date/Tech
Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin?
New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [x] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW
EDDs: [ ] Excel Summary [ ] Equis [ ] Custom
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type Excel

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **WSP USA Inc.**

Project	KopFlex Offsite
Workorder	3392528
Report ID	378239 on 12/31/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Dec 17, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
- Elliott Martynkiewicz - WSP USA Inc.
- Eric Johnson - WSP USA INC
- Erik Reinert - WSP USA Inc

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3392528001	MW-25-190	Ground Water	12/16/2024 10:50	12/17/2024 10:17	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type LCS for method SW846 8260D was outside the control limits for the analyte Hexachlorobutadiene. The % Recovery was reported as 130 and the control limits were 55 to 128.

Detected Results Summary

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

Compound	Result	Units	RDL	Method	Flag
SEMIVOLATILE SIM					
1,4-Dioxane	6.8	ug/L	1.0	SW846 8270E SIM	#
VOLATILE ORGANICS					
1,1,1-Trichloroethane	2.1	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethane	4.9	ug/L	1.0	SW846 8260D	#
1,1-Dichloroethene	20.4	ug/L	1.0	SW846 8260D	#
Methyl t-Butyl Ether	1.0	ug/L	1.0	SW846 8260D	#

Results

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

SEMIVOLATILE SIM

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,4-Dioxane	6.8		ug/L	1.0	SW846 8270E SIM	1	12/20/2024 00:53	CGS	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2-Methylnapthalene-d10	7297-45-2	76.1%	29 – 112	12/20/2024 00:53	
Fluoranthene-d10	93951-69-0	92%	45 – 130	12/20/2024 00:53	

VOLATILE ORGANICS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1,1-Trichloroethane	2.1		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1,2,2-Tetrachloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1,2-Trichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloroethane	4.9		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloroethene	20.4		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,1-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,3-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,3-Trichloropropane	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2,4-Trichlorobenzene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dibromo-3-chloropropane	7.0 U	U	ug/L	7.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dibromoethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,3-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,3-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
1,4-Dichlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2,2-Dichloropropane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2-Butanone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
2-Hexanone	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Acetone	10.0 U	U	ug/L	10.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Benzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromochloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromodichloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromoform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Bromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Carbon Tetrachloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chlorobenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chlorodibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloroethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloroform	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Chloromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A

Results

Client Sample ID	MW-25-190	Collected	12/16/2024 10:50
Lab Sample ID	3392528001	Lab Receipt	12/17/2024 10:17

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
cis-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
cis-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Dibromomethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Dichlorodifluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Diisopropyl ether	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Ethylbenzene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Hexachlorobutadiene	5.0 U	U,1	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Methyl t-Butyl Ether	1.0		ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Methylene Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
mp-Xylene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Naphthalene	2.0 U	U	ug/L	2.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
o-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
o-Xylene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
p-Chlorotoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
p-Isopropyltoluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Styrene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Tetrachloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Toluene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Total Xylenes	3.0 U	U	ug/L	3.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
trans-1,2-Dichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
trans-1,3-Dichloropropene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Trichloroethene	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Trichlorofluoromethane	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Vinyl Acetate	5.0 U	U	ug/L	5.0	SW846 8260D	1	12/20/2024 13:00	ILY	A
Vinyl Chloride	1.0 U	U	ug/L	1.0	SW846 8260D	1	12/20/2024 13:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	62 – 133	12/20/2024 13:00	
4-Bromofluorobenzene	460-00-4	93.2%	79 – 114	12/20/2024 13:00	
Dibromofluoromethane	1868-53-7	99.7%	78 – 116	12/20/2024 13:00	
Toluene-d8	2037-26-5	105%	76 – 127	12/20/2024 13:00	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3392528001	MW-25-190	SW846 8270E SIM	SW846 3510C	
		SW846 8260D	N/A	

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM

QC Batch

QC Batch	1356816	Prep Method	SW846 3510C
Date	12/18/2024 09:40	Analysis Method	SW846 8270E SIM
Tech.	EJH		

Associated Samples

3392528001

Duplicate 3919807 (DUP) 3392038007 (non-Project Sample) For QC Batch 1356816

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
1,4-Dioxane	123-91-1	DUP	0	0	RPD	0	(Max-30)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	DUP	0.87	1	86.8	29 - 112	
Fluoranthene-d10	93951-69-0	DUP	1.1	1	113	45 - 130	

Method Blank 3919805 (MB) Created on 12/18/2024 08:07 For QC Batch 1356816

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,4-Dioxane	123-91-1	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	BLK	0.73	1	72.9	29 - 112	
Fluoranthene-d10	93951-69-0	BLK	0.87	1	87.2	45 - 130	

Lab Control Standard 3919806 (LCS) Created on 12/18/2024 08:07 For QC Batch 1356816

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dioxane	123-91-1	LCS	0.43		1	42.9	22 - 75		U

QUALITY CONTROL SAMPLES

SEMIVOLATILE SIM (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
2-Methylnapthalene-d10	7297-45-2	LCS	0.7	1	70.2	29 - 112	
Fluoranthene-d10	93951-69-0	LCS	0.86	1	86.5	45 - 130	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1358219	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260D
Tech.			

Associated Samples

3392528001

Matrix Spike 3921681 (MS) 3392316003 (non-Project Sample) For QC Batch 1358219

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	MS	22.2	0	20	111	78 - 121		
1,1,1-Trichloroethane	71-55-6	MS	21.5	0	20	107	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	MS	24	0	20	120	74 - 135		
1,1,2-Trichloroethane	79-00-5	MS	22.2	0	20	111	82 - 126		
1,1-Dichloroethane	75-34-3	MS	20.1	0	20	101	78 - 124		
1,1-Dichloroethene	75-35-4	MS	20.6	0	20	103	63 - 128		
1,1-Dichloropropene	563-58-6	MS	20.6	0	20	103	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	MS	21.9	0	20	110	61 - 126		
1,2,3-Trichloropropane	96-18-4	MS	22.8	0	20	114	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	MS	23.7	0	20	118	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	MS	21.6	0	20	108	59 - 133		
1,2-Dibromoethane	106-93-4	MS	22.4	0	20	112	80 - 124		
1,2-Dichlorobenzene	95-50-1	MS	22.3	0	20	111	82 - 118		
1,2-Dichloroethane	107-06-2	MS	19.3	0	20	96.4	70 - 133		
1,2-Dichloropropane	78-87-5	MS	20.6	0	20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	MS	21.8	0	20	109	81 - 118		
1,3-Dichloropropane	142-28-9	MS	21.7	0	20	109	82 - 126		
1,4-Dichlorobenzene	106-46-7	MS	21.8	0	20	109	81 - 116		
2,2-Dichloropropane	594-20-7	MS	20.3	0	20	102	64 - 129		
2-Butanone	78-93-3	MS	97.1	0	100	97.1	50 - 152		
2-Hexanone	591-78-6	MS	109	0	100	109	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	111	0	100	111	71 - 146		
Acetone	67-64-1	MS	87.4	0	100	87.4	40 - 151		
Benzene	71-43-2	MS	20.4	0	20	102	80 - 124		
Bromobenzene	108-86-1	MS	22.4	0	20	112	81 - 119		
Bromochloromethane	74-97-5	MS	21.2	0	20	106	73 - 117		
Bromodichloromethane	75-27-4	MS	21.7	0	20	108	79 - 126		
Bromoform	75-25-2	MS	21.8	0	20	109	70 - 123		
Bromomethane	74-83-9	MS	15.6	0	20	78	45 - 148		
Carbon Tetrachloride	56-23-5	MS	18.6	0	20	93.1	62 - 132		
Chlorobenzene	108-90-7	MS	20.9	0	20	104	85 - 117		
Chlorodibromomethane	124-48-1	MS	19.4	0	20	97.1	77 - 122		
Chloroethane	75-00-3	MS	19.9	0	20	99.7	51 - 142		
Chloroform	67-66-3	MS	19.8	0	20	98.9	78 - 122		
Chloromethane	74-87-3	MS	17.4	0	20	87.2	38 - 156		
cis-1,2-Dichloroethene	156-59-2	MS	20.6	0	20	103	78 - 125		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
cis-1,3-Dichloropropene	10061-01-5	MS	18.6	0	20	92.9	81 - 121		
Dibromomethane	74-95-3	MS	20.7	0	20	104	81 - 125		
Dichlorodifluoromethane	75-71-8	MS	17.6	0	20	88	17 - 166		
Diisopropyl ether	108-20-3	MS	20.2	0	20	101	74 - 131		
Ethylbenzene	100-41-4	MS	21.7	0	20	108	80 - 124		
Hexachlorobutadiene	87-68-3	MS	25	0	20	125	55 - 128		
Methyl t-Butyl Ether	1634-04-4	MS	20.2	0	20	101	69 - 115		
Methylene Chloride	75-09-2	MS	20.5	0	20	102	76 - 121		
mp-Xylene	108383/106423	MS	42.8	0	40	107	79 - 125		
Naphthalene	91-20-3	MS	21.9	0	20	110	56 - 134		
o-Chlorotoluene	95-49-8	MS	22.6	0	20	113	78 - 126		
o-Xylene	95-47-6	MS	21.5	0	20	107	79 - 124		
p-Chlorotoluene	106-43-4	MS	22.2	0	20	111	78 - 125		
p-Isopropyltoluene	99-87-6	MS	23.7	0	20	119	72 - 123		
Styrene	100-42-5	MS	20	0	20	99.9	79 - 123		
Tetrachloroethene	127-18-4	MS	19.7	0	20	98.7	72 - 124		
Toluene	108-88-3	MS	21.5	0	20	107	80 - 125		
Total Xylenes	1330-20-7	MS	64.3	0	60	107	79 - 125		
trans-1,2-Dichloroethene	156-60-5	MS	20.1	0	20	100	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	MS	18.8	0	20	93.8	78 - 126		
Trichloroethene	79-01-6	MS	19.7	0	20	98.5	77 - 124		
Trichlorofluoromethane	75-69-4	MS	21.1	0	20	106	38 - 123		
Vinyl Acetate	108-05-4	MS	16.8	0	20	83.8	58 - 136		
Vinyl Chloride	75-01-4	MS	19.4	0	20	97	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	29.7	30	99	62 - 133	
4-Bromofluorobenzene	460-00-4	MS	29.3	30	97.8	79 - 114	
Dibromofluoromethane	1868-53-7	MS	28.8	30	95.9	78 - 116	
Toluene-d8	2037-26-5	MS	29.4	30	98.1	76 - 127	

Method Blank 3921656 (MB) Created on 12/20/2024 11:36 For QC Batch 1358219

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	BLK	1.0 U	ug/L	1.0	U
1,1,1-Trichloroethane	71-55-6	BLK	1.0 U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	1.0 U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	1.0 U	ug/L	1.0	U
1,1-Dichloropropene	563-58-6	BLK	1.0 U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	2.0 U	ug/L	2.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
1,2,3-Trichloropropane	96-18-4	BLK	2.0 U	ug/L	2.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	2.0 U	ug/L	2.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	7.0 U	ug/L	7.0	U
1,2-Dibromoethane	106-93-4	BLK	1.0 U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	1.0 U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	1.0 U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	1.0 U	ug/L	1.0	U
1,3-Dichloropropane	142-28-9	BLK	1.0 U	ug/L	1.0	U
1,4-Dichlorobenzene	106-46-7	BLK	1.0 U	ug/L	1.0	U
2,2-Dichloropropane	594-20-7	BLK	1.0 U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	10.0 U	ug/L	10.0	U
2-Hexanone	591-78-6	BLK	5.0 U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	5.0 U	ug/L	5.0	U
Acetone	67-64-1	BLK	10.0 U	ug/L	10.0	U
Benzene	71-43-2	BLK	1.0 U	ug/L	1.0	U
Bromobenzene	108-86-1	BLK	1.0 U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	1.0 U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	1.0 U	ug/L	1.0	U
Bromoform	75-25-2	BLK	1.0 U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	1.0 U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	1.0 U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	1.0 U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	1.0 U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	1.0 U	ug/L	1.0	U
Chloroform	67-66-3	BLK	1.0 U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	1.0 U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	1.0 U	ug/L	1.0	U
cis-1,3-Dichloropropene	10061-01-5	BLK	1.0 U	ug/L	1.0	U
Dibromomethane	74-95-3	BLK	1.0 U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	1.0 U	ug/L	1.0	U
Diisopropyl ether	108-20-3	BLK	1.0 U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	1.0 U	ug/L	1.0	U
Hexachlorobutadiene	87-68-3	BLK	5.0 U	ug/L	5.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	1.0 U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	1.0 U	ug/L	1.0	U
mp-Xylene	108383/106423	BLK	2.0 U	ug/L	2.0	U
Naphthalene	91-20-3	BLK	2.0 U	ug/L	2.0	U
o-Chlorotoluene	95-49-8	BLK	1.0 U	ug/L	1.0	U
o-Xylene	95-47-6	BLK	1.0 U	ug/L	1.0	U
p-Chlorotoluene	106-43-4	BLK	1.0 U	ug/L	1.0	U
p-Isopropyltoluene	99-87-6	BLK	1.0 U	ug/L	1.0	U
Styrene	100-42-5	BLK	1.0 U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	1.0 U	ug/L	1.0	U
Toluene	108-88-3	BLK	1.0 U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	3.0 U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	1.0 U	ug/L	1.0	U
trans-1,3-Dichloropropene	10061-02-6	BLK	1.0 U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Trichloroethene	79-01-6	BLK	1.0 U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	1.0 U	ug/L	1.0	U
Vinyl Acetate	108-05-4	BLK	5.0 U	ug/L	5.0	U
Vinyl Chloride	75-01-4	BLK	1.0 U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.2	30	101	62 - 133	
4-Bromofluorobenzene	460-00-4	BLK	29.9	30	99.6	79 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.8	30	96.1	78 - 116	
Toluene-d8	2037-26-5	BLK	30.6	30	102	76 - 127	

Lab Control Standard 3921657 (LCS) Created on 12/20/2024 11:36 For QC Batch 1358219

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	LCS	22		20	110	78 - 121		
1,1,1-Trichloroethane	71-55-6	LCS	21.2		20	106	66 - 130		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	22.5		20	112	74 - 135		
1,1,2-Trichloroethane	79-00-5	LCS	21.5		20	107	82 - 126		
1,1-Dichloroethane	75-34-3	LCS	20.2		20	101	78 - 124		
1,1-Dichloroethene	75-35-4	LCS	21.6		20	108	63 - 128		
1,1-Dichloropropene	563-58-6	LCS	20.2		20	101	76 - 126		
1,2,3-Trichlorobenzene	87-61-6	LCS	22.3		20	112	61 - 126		
1,2,3-Trichloropropane	96-18-4	LCS	21.4		20	107	75 - 132		
1,2,4-Trichlorobenzene	120-82-1	LCS	24.1		20	120	67 - 123		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	20		20	100	59 - 133		
1,2-Dibromoethane	106-93-4	LCS	21.4		20	107	80 - 124		
1,2-Dichlorobenzene	95-50-1	LCS	22		20	110	82 - 118		
1,2-Dichloroethane	107-06-2	LCS	19.3		20	96.6	70 - 133		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	103	81 - 127		
1,3-Dichlorobenzene	541-73-1	LCS	21.9		20	109	81 - 118		
1,3-Dichloropropane	142-28-9	LCS	21.2		20	106	82 - 126		
1,4-Dichlorobenzene	106-46-7	LCS	21.7		20	108	81 - 116		
2,2-Dichloropropane	594-20-7	LCS	22.3		20	111	64 - 129		
2-Butanone	78-93-3	LCS	89.2		100	89.2	50 - 152		
2-Hexanone	591-78-6	LCS	94.8		100	94.8	65 - 154		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	96.9		100	96.9	71 - 146		
Acetone	67-64-1	LCS	94.6		100	94.6	40 - 151		
Benzene	71-43-2	LCS	20.1		20	101	80 - 124		
Bromobenzene	108-86-1	LCS	22.1		20	110	81 - 119		
Bromochloromethane	74-97-5	LCS	21.3		20	106	73 - 117		
Bromodichloromethane	75-27-4	LCS	21.8		20	109	79 - 126		
Bromoform	75-25-2	LCS	21.3		20	106	70 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromomethane	74-83-9	LCS	16.4		20	81.9	45 - 148		
Carbon Tetrachloride	56-23-5	LCS	18.9		20	94.3	62 - 132		
Chlorobenzene	108-90-7	LCS	20.5		20	103	85 - 117		
Chlorodibromomethane	124-48-1	LCS	19.1		20	95.4	77 - 122		
Chloroethane	75-00-3	LCS	19.7		20	98.3	51 - 142		
Chloroform	67-66-3	LCS	19.6		20	98.1	78 - 122		
Chloromethane	74-87-3	LCS	17.8		20	88.8	38 - 156		
cis-1,2-Dichloroethene	156-59-2	LCS	20.6		20	103	78 - 125		
cis-1,3-Dichloropropene	10061-01-5	LCS	19.2		20	96.1	81 - 121		
Dibromomethane	74-95-3	LCS	20.4		20	102	81 - 125		
Dichlorodifluoromethane	75-71-8	LCS	16.8		20	84	17 - 166		
Diisopropyl ether	108-20-3	LCS	20.7		20	104	74 - 131		
Ethylbenzene	100-41-4	LCS	21.2		20	106	80 - 124		
Hexachlorobutadiene	87-68-3	LCS	26		20	130*	55 - 128		
Methyl t-Butyl Ether	1634-04-4	LCS	20.2		20	101	69 - 115		
Methylene Chloride	75-09-2	LCS	21.1		20	105	76 - 121		
mp-Xylene	108383/106423	LCS	41.9		40	105	79 - 125		
Naphthalene	91-20-3	LCS	20.5		20	103	56 - 134		
o-Chlorotoluene	95-49-8	LCS	22		20	110	78 - 126		
o-Xylene	95-47-6	LCS	20.8		20	104	79 - 124		
p-Chlorotoluene	106-43-4	LCS	22.1		20	111	78 - 125		
p-Isopropyltoluene	99-87-6	LCS	23.2		20	116	72 - 123		
Styrene	100-42-5	LCS	19.9		20	99.5	79 - 123		
Tetrachloroethene	127-18-4	LCS	20.1		20	100	72 - 124		
Toluene	108-88-3	LCS	21.1		20	106	80 - 125		
Total Xylenes	1330-20-7	LCS	62.7		60	104	79 - 125		
trans-1,2-Dichloroethene	156-60-5	LCS	20.4		20	102	71 - 122		
trans-1,3-Dichloropropene	10061-02-6	LCS	19.2		20	95.8	78 - 126		
Trichloroethene	79-01-6	LCS	19.3		20	96.5	77 - 124		
Trichlorofluoromethane	75-69-4	LCS	19.3		20	96.7	38 - 123		
Vinyl Acetate	108-05-4	LCS	19.3		20	96.7	58 - 136		
Vinyl Chloride	75-01-4	LCS	18.8		20	94	27 - 138		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	28.8	30	95.8	62 - 133	
4-Bromofluorobenzene	460-00-4	LCS	29.6	30	98.5	79 - 114	
Dibromofluoromethane	1868-53-7	LCS	28.8	30	96	78 - 116	
Toluene-d8	2037-26-5	LCS	30.2	30	101	76 - 127	

Duplicate 3921680 (DUP) 3392528001 For QC Batch 1358219

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
1,1,1,2-Tetrachloroethane	630-20-6	DUP	0	0	RPD	0	(Max-)	U
1,1,1-Trichloroethane	71-55-6	DUP	2.1796	2.1094	RPD	3.27	(Max-)	
1,1,2,2-Tetrachloroethane	79-34-5	DUP	0	0	RPD	0	(Max-)	U
1,1,2-Trichloroethane	79-00-5	DUP	0	0	RPD	0	(Max-)	U
1,1-Dichloroethane	75-34-3	DUP	4.9556	4.8896	RPD	1.34	(Max-)	
1,1-Dichloroethene	75-35-4	DUP	21.2252	20.3893	RPD	4.02	(Max-)	
1,1-Dichloropropene	563-58-6	DUP	0	0	RPD	0	(Max-)	U
1,2,3-Trichlorobenzene	87-61-6	DUP	0	0	RPD	0	(Max-)	U
1,2,3-Trichloropropane	96-18-4	DUP	0	0	RPD	0	(Max-)	U
1,2,4-Trichlorobenzene	120-82-1	DUP	0	0	RPD	0	(Max-)	U
1,2-Dibromo-3-chloropropane	96-12-8	DUP	0	0	RPD	0	(Max-)	U
1,2-Dibromoethane	106-93-4	DUP	0	0	RPD	0	(Max-)	U
1,2-Dichlorobenzene	95-50-1	DUP	0	0	RPD	0	(Max-)	U
1,2-Dichloroethane	107-06-2	DUP	0.3204	0	RPD	200	(Max-)	U
1,2-Dichloropropane	78-87-5	DUP	0	0	RPD	0	(Max-)	U
1,3-Dichlorobenzene	541-73-1	DUP	0	0	RPD	0	(Max-)	U
1,3-Dichloropropane	142-28-9	DUP	0	0	RPD	0	(Max-)	U
1,4-Dichlorobenzene	106-46-7	DUP	0	0	RPD	0	(Max-)	U
2,2-Dichloropropane	594-20-7	DUP	0	0	RPD	0	(Max-)	U
2-Butanone	78-93-3	DUP	0	0	RPD	0	(Max-)	U
2-Hexanone	591-78-6	DUP	0	0	RPD	0	(Max-)	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	DUP	0	0	RPD	0	(Max-)	U
Acetone	67-64-1	DUP	0	0	RPD	0	(Max-)	U
Benzene	71-43-2	DUP	0	0	RPD	0	(Max-)	U
Bromobenzene	108-86-1	DUP	0	0	RPD	0	(Max-)	U
Bromochloromethane	74-97-5	DUP	0	0	RPD	0	(Max-)	U
Bromodichloromethane	75-27-4	DUP	0	0	RPD	0	(Max-)	U
Bromoform	75-25-2	DUP	0	0	RPD	0	(Max-)	U
Bromomethane	74-83-9	DUP	0	0	RPD	0	(Max-)	U
Carbon Tetrachloride	56-23-5	DUP	0	0	RPD	0	(Max-)	U
Chlorobenzene	108-90-7	DUP	0	0	RPD	0	(Max-)	U
Chlorodibromomethane	124-48-1	DUP	0	0	RPD	0	(Max-)	U
Chloroethane	75-00-3	DUP	0	0	RPD	0	(Max-)	U
Chloroform	67-66-3	DUP	0	0	RPD	0	(Max-)	U
Chloromethane	74-87-3	DUP	0	0	RPD	0	(Max-)	U
cis-1,2-Dichloroethene	156-59-2	DUP	0	0	RPD	0	(Max-)	U
cis-1,3-Dichloropropene	10061-01-5	DUP	0	0	RPD	0	(Max-)	U
Dibromomethane	74-95-3	DUP	0	0	RPD	0	(Max-)	U
Dichlorodifluoromethane	75-71-8	DUP	0	0	RPD	0	(Max-)	U
Diisopropyl ether	108-20-3	DUP	0	0	RPD	0	(Max-)	U
Ethylbenzene	100-41-4	DUP	0	0	RPD	0	(Max-)	U
Hexachlorobutadiene	87-68-3	DUP	0	0	RPD	0	(Max-)	U
Methyl t-Butyl Ether	1634-04-4	DUP	1.0544	1.0380	RPD	1.57	(Max-)	
Methylene Chloride	75-09-2	DUP	0	0	RPD	0	(Max-)	U
mp-Xylene	108383/106423	DUP	0	0	RPD	0	(Max-)	U
Naphthalene	91-20-3	DUP	0	0	RPD	0	(Max-)	U
o-Chlorotoluene	95-49-8	DUP	0	0	RPD	0	(Max-)	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
o-Xylene	95-47-6	DUP	0	0	RPD	0	(Max-)	U
p-Chlorotoluene	106-43-4	DUP	0	0	RPD	0	(Max-)	U
p-Isopropyltoluene	99-87-6	DUP	0	0	RPD	0	(Max-)	U
Styrene	100-42-5	DUP	0	0	RPD	0	(Max-)	U
Tetrachloroethene	127-18-4	DUP	0	0	RPD	0	(Max-)	U
Toluene	108-88-3	DUP	0	0	RPD	0	(Max-)	U
Total Xylenes	1330-20-7	DUP	0	0	RPD	0	(Max-)	U
trans-1,2-Dichloroethene	156-60-5	DUP	0	0	RPD	0	(Max-)	U
trans-1,3-Dichloropropene	10061-02-6	DUP	0	0	RPD	0	(Max-)	U
Trichloroethene	79-01-6	DUP	0	0	RPD	0	(Max-)	U
Trichlorofluoromethane	75-69-4	DUP	0	0	RPD	0	(Max-)	U
Vinyl Acetate	108-05-4	DUP	0	0	RPD	0	(Max-)	U
Vinyl Chloride	75-01-4	DUP	0	0	RPD	0	(Max-)	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	DUP	31	30	103	62 - 133	
4-Bromofluorobenzene	460-00-4	DUP	27.3	30	91	79 - 114	
Dibromofluoromethane	1868-53-7	DUP	29.4	30	98.1	78 - 116	
Toluene-d8	2037-26-5	DUP	29.9	30	99.8	76 - 127	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3392528001	MW-25-190	SW846 3510C	1356816	12/18/2024 09:40	EJH	SW846 8270E SIM	1357496
		N/A	N/A	N/A		SW846 8260D	1358219

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

3392528
Logged By: MJE
PM: SJB

COC #: ALS Quot ____ of

Client Name: WSP USA
Address: 13530 Dulles Technology Dr. Suite 300 Herndon, VA
Contact: Eric Johnson
Phone#:
Project Name/#: LopFlex OFF site
Bill To:
Purchase Order #:
TAT: ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? ☑ eric.johnson@wsp.com

Container Type	VOAs	250								
Container Size	40	Amber								
Preservative	HCl	NA								

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	VOCs 8260D	1,4 dioxane 8270								
							Enter Number of Containers Per Sample or Field Results Below.									
1	MW-25-190	12/16/24	1050		G	GW	3	2								
2																
3																
4																
5																
6																
7																
8																
9																
10																

Circle Sample Collector: ALS Tech / Client
Name: Stevie Hennck ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
12/16/24	1145	1	WSP	2	Fedex
12/17/24	1017	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)
Temp Taken By: MJE Therm ID: 569 WO Temp (°C) 1°
Receipt Info completed by: MJE WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking # 7708 1708 4750
Deviations? NO YES If YES, list below:
Client contact: Date/Tech
Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin?
New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
standard TAT

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: Lab ☐ Special ☐

EDDS: Format Type

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ____ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

APPENDIX

B HISTORICAL GROUNDWATER SAMPLING RESULTS

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
Shallow Zone Lower Patapsco Wells (b)											
MW-25 (c)	3/19/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	6/24/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/23/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	1/6/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/23/2016	1.0 U	1.0 U	1.0 U	1.5	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	7/20/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**11.7**	1.0 U	1.0 U	1.0 U
	2/13/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
MW-28 (c)	3/17/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/22/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	1/5/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/22/2016	1.0 U	1.0 U	1.0 U	6.2	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	7/19/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	2/14/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-45	3/24/2017	1.0 U	1.0 U	1.9	1.0 U	2.3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/28/2018	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/8/2020	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	7/14/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Deep Zone Lower Patapsco Wells											
MW-24D	3/22/2016	12.5 U	**88.0**	**15.7**	**1,780**	12.5 U	**561**	**39.4**	38.6	12.5 U	12.5 U
	12/8/2016	5.0 U	**36.1**	**5.2**	**701**	5.0 U	**192**	10.0 U	9.0	5.0 U	5.0 U
	5/2/2017	5.0 U	**40.4**	**5.6**	**830**	5.0 U	**216**	10.0 U	10.2	5.0 U	5.0 U
	11/14/2017	5.0 U	**28.1**	3.4	**803**	2.3	**212**	**11.7**	10.5	0.5 J	**5.9**
	5/30/2018	4.0 U	**26.6**	4.0 U	**529**	4.0 U	**187**	8.0 U	5.5	4.0 U	4.0 U
	11/7/2018	5.0 U	**29.8**	5.0 U	**560**	5.0 U	2.0 U	10.0 U	5.0 U	5.0 U	5.0 U
	5/22/2019	10.0 U	**66.2**	10.0 U	**1,190**	10.0 U	**359**	50.0 U	18.0	10.0 U	10.0 U
	11/19/2019	5.0 U	**54.5**	**6.6**	**868**	5.0 U	**155**	25.0 U	10.0	5.0 U	6.0 U
	5/12/2020	2.5 U	**25.0**	3.3	**402**	5.0 U	**139**	25.0 U	3.7	5.0 U	3.2
	11/23/2020	4.0 U	**73.5**	4.0 U	**505**	4.0 U	**208**	20.0 U	4.4	4.0 U	4.0 U
	5/10/2021	6.2	**151**	**6.3**	**788**	7.2	**299**	25.0 U	10.9	5.0 U	5.0 U
	11/15/2021	10.0 U	**142**	10.0 U	**1,300**	10.0 U	**475**	25.0 U	16.1	5.0 U	5.0 U
	6/27/2022	3.6	**142**	**7.4**	**1,490**	6.9	**165**	1.0 U	18.5	1.0	**8.6**
	11/21/2022	2.8	**114**	**7.5**	**1,020**	5.5	**148**	1.0 U	15.3	1.2	**7.7**
	7/14/2023	1.6	**110**	**7.1**	**954**	4.8	**90**	10.0 U	14.8	1.1	**7.3**
	12/4/2023	10.0 U	**88.1**	10.0 U	**1,130**	10.0 U	**102**	10.0 U	11.9	10.0 U	10.0 U
	5/20/2024	10.0 U	**76.8**	10.0 U	**999**	10.0 U	**78**	10.0 U	10.0 U	10.0 U	10.0 U
	11/11/2024	10.0 U	**73.8**	10.0 U	**947**	10.0 U	**160**	10.0 U	10.0 U	10.0 U	10.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-25D-130	3/19/2015	10.0 U	**38.6**	**10.8**	**854**	10.0 U	**446**	200 U	**8,930**	100.0 U	100.0 U
	6/24/2015	1.0 U	**37.1**	**8.9**	**1,030**	4.6	**303**	2.0 U	46.3	1.2	**6.8**
	9/23/2015	10.0 U	**29.7**	10.0 U	**697**	10.0 U	**295**	20.0 U	32.3	10.0 U	**14.2**
	1/7/2016	5.0 U	**33.4**	**9.7**	**800**	5.0 U	**398**	10.0 U	5.0 U	5.0 U	**6.1**
	3/23/2016	5.0 U	**24.5**	**8.0**	**676**	5.0 U	**302**	10.0 U	26.2	5.0 U	**5.0**
	7/19/2016	10.0 U	**39.3**	**10.2**	**1,090**	4.9 J	**367**	14.3 J	37.0	10.0 U	**6.5** J
	9/9/2016	5.0 U	**27.9**	**6.4**	**661**	5.0 U	**241**	**12.0**	25.0	5.0 U	5.0 U
	12/8/2016	1.0 U	**6.7**	1.5	**171**	1.0 U	**13.6**	2.0 U	6.9	1.0 U	1.0 U
	2/21/2017	1.0 U	**7.2**	1.7	**194**	1.0 U	**69.1**	2.0 U	7.0	1.0 U	1.2
	5/2/2017	2.0 U	**6.5**	2.0 U	**174**	2.0 U	**61.0**	4.0 U	5.0	2.0 U	2.0 U
	8/31/2017	2.0 U	**7.4**	1.7	**193**	2.0 U	**57.9**	4.0 U	6.9	2.0 U	2.0 U
	11/14/2017	2.0 U	**5.1**	1.3	**151**	0.6 J	**58.5**	5.0 U	6.4	1.0 U	1.1
	2/13/2018	2.0 U	**6.3**	2.0 U	**154**	2.0 U	**67.1**	5.0 U	6.4	1.0 U	1.0 U
	5/30/2018	2.0 U	**5.0**	1.4	**144**	2.0 U	**53.9**	5.0 U	5.3	1.0 U	1.0 U
	11/8/2018	2.0 U	**4.4**	1.1	**109**	2.0 U	**40.2**	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	**3.7**	1.0 U	**96.2**	1.0 U	**38.4**	5.0 U	4.2	1.0 U	1.0 U
	11/19/2019	1.0 U	2.7	1.0 U	**62.1**	1.0 U	**31.0**	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	**3.3**	1.0 U	**69.1**	1.0 U	**32.6**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	**3.3**	1.0 U	**76.0**	1.0 U	**32.4**	5.0 U	4.9	1.0 U	1.0 U
	5/10/2021	1.0 U	**3.0**	1.0 U	**50.8**	1.0 U	**30.2**	5.0 U	3.1	1.0 U	1.0 U
	12/27/2021	1.0 U	**3.0**	1.0 U	**45.5**	1.0 U	**29.1**	5.0 U	3.3	1.0 U	1.0 U
	6/27/2022	1.0 U	**4.2**	1.0 U	**65.6**	1.0 U	**15.6**	1.0 U	5.0	1.0 U	1.0 U
	11/21/2022	1.0 U	**5.5**	1.0 U	**80.2**	1.0 U	**16.1**	1.0 U	5.6	1.0 U	1.0 U
Duplicate	11/21/2022	1.0 U	**5.3**	1.0 U	**76.2**	1.0 U	**19.1**	1.0 U	5.6	1.0 U	1.0 U
	5/22/2023	1.0 U	**4.3**	1.0 U	**52.0**	1.0 U	**21.3**	1.0 U	4.5	1.0 U	1.0 U
Duplicate	5/22/2023	1.0 U	**5.0**	1.0 U	**60.0**	1.0 U	**21.0**	1.0 U	5.2	1.0 U	1.0 U
	12/4/2023	10.0 U	**6.9**	1.1	**110**	1.0 U	**28.4**	1.0 U	6.2	1.0 U	1.0 U
Duplicate	12/4/2023	10.0 U	**5.9**	1.0 U	**100**	1.0 U	**23.7**	1.0 U	5.6	1.0 U	1.0 U
	5/20/2024	1.0 U	**7.2**	1.4	**123**	1.0 U	**16.4**	1.0 U	6.8	1.0 U	1.0 U
Duplicate	5/20/2024	1.0 U	**5.0**	1.2	**104**	1.0 U	**14.7**	1.0 U	5.8	1.0 U	1.0 U
	11/26/2024	1.0 U	**6.8**	1.0	**92**	1.0 U	**21.4**	1.0 U	6.1	1.0 U	1.0 U
Duplicate	11/26/2024	1.0 U	**6.7**	1.1	**89**	1.0 U	**23.6**	1.0 U	5.8	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-25D-192	3/19/2015	1.0 U	**11.7**	1.0 U	**53.0**	1.0 U	**49.4**	2.0 U	13.7	1.0 U	1.0 U
	6/25/2015	1.0 U	**11.9**	1.0 U	**59.4**	1.0 U	**39.8**	2.0 U	14.2	1.0 U	1.0 U
	9/22/2015	1.0 U	**13.9**	1.0 U	**51.4**	1.0 U	**45.0**	2.0 U	12.9	1.0 U	1.3
	1/7/2016	1.0 U	**11.7**	1.0 U	**47.2**	1.0 U	**41.7**	2.0 U	12.5	1.0 U	1.0 U
	3/23/2016	1.0 U	**10.3**	1.0 U	**43.3**	1.0 U	**42.2**	2.0 U	11.3	1.0 U	1.0 U
	7/20/2016	1.0 U	**11.7**	0.73 J	**54.9**	1.0 U	**54.4**	2.0 U	11.1	1.0 U	1.0 U
	9/8/2016	1.0 U	**12.9**	1.0 U	**56.8**	1.0 U	**39.3**	2.0 U	12.6	1.0 U	1.0 U
	12/8/2016	1.0 U	**16.1**	1.0 U	**64.6**	1.0 U	**51.3**	2.0 U	13.3	1.0 U	1.0 U
	2/21/2017	1.0 U	**14.0**	1.0 U	**63.3**	1.0 U	**52.1**	2.0 U	11.6	1.0 U	1.0 U
	5/2/2017	1.0 U	**16.9**	1.0 U	**81.0**	1.0 U	**53.1**	2.0 U	13.5	1.0 U	1.0 U
	8/31/2017	1.0 U	**15.7**	1.0 U	**62.5**	1.0 U	**44.3**	2.0 U	13.1	1.0 U	1.0 U
	11/14/2017	5.0 U	**13.6**	0.67 J	**67.2**	1.0 U	**56.7**	5.0 U	13.6	1.0 U	1.0 U
	2/13/2018	5.0 U	**13.7**	1.0 U	**69.2**	1.0 U	**42.7**	5.0 U	11.0	1.0 U	1.0 U
	5/30/2018	5.0 U	**10.8**	1.0 U	**58.3**	1.0 U	**50.8**	5.0 U	7.2	1.0 U	1.0 U
	11/8/2018	5.0 U	**13.7**	1.0 U	**61.0**	1.0 U	**49.3**	5.0 U	9.8	1.0 U	1.0 U
	5/22/2019	1.0 U	**11.8**	1.0 U	**51.7**	1.0 U	**36.7**	5.0 U	8.5	1.0 U	1.0 U
	11/19/2019	1.0 U	**12.6**	1.0 U	**53.2**	1.0 U	**41.1**	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	**12.8**	1.0 U	**58.0**	1.0 U	**41.1**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	**11.3**	1.0 U	**46.9**	1.0 U	**41.5**	5.0 U	5.8	1.0 U	1.0 U
	5/10/2021	1.0 U	**6.5**	1.0 U	**28.3**	1.0 U	**22.6**	5.0 U	3.2	1.0 U	1.0 U
	12/27/2021	1.0 U	**6.2**	1.0 U	**26.0**	1.0 U	**21.6**	5.0 U	3.4	1.0 U	1.0 U
	6/27/2022	1.0 U	**8.8**	1.0 U	**37.3**	1.0 U	**11.6**	1.0 U	4.7	1.0 U	1.0 U
	11/21/2022	1.0 U	**7.3**	1.0 U	**29.1**	1.0 U	**10.2**	1.0 U	3.7	1.0 U	1.0 U
	5/22/2023	1.0 U	**7.1**	1.0 U	**30.1**	1.0 U	**9.0**	1.0 U	3.6	1.0 U	1.0 U
	12/4/2023	1.0 U	**8.4**	1.0 U	**36.5**	1.0 U	**9.4**	1.0 U	3.9	1.0 U	1.0 U
	5/20/2024	1.0 U	**5.0**	1.0 U	**19.5**	1.0 U	**6.4**	1.0 U	2.5	1.0 U	1.0 U
	12/16/2024	1.0 U	**4.9**	1.0 U	**20.4**	1.0 U	**6.8**	1.0 U	2.1	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
	Groundwater Quality Standard (µg/L)	NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-28D	3/17/2015	1.0 U	1.0 U	1.0 U	**10.6**	1.0 U	**5.0**	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	**12.8**	1.0 U	4.5	2.0 U	1.0 U	1.0 U	1.0 U
	9/22/2015	1.0 U	1.0 U	1.0 U	**14.3**	1.0 U	4.4	2.0 U	1.0 U	1.0 U	1.0 U
	1/5/2016	1.0 U	1.0 U	1.0 U	**11.5**	1.0 U	**5.5**	2.0 U	1.0 U	1.0 U	1.0 U
	3/23/2016	1.0 U	1.0 U	1.0 U	**9.1**	1.0 U	4.0	2.0 U	1.0 U	1.0 U	1.0 U
	7/19/2016	1.0 U	1.0 U	0.25 J	**10.1**	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	1.0 U	1.0 U	1.0 U	**12.0**	1.0 U	**5.0**	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	6.3	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	4.6	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	5.8	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	5.0	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	5.5	1.0 U	3.5	5.0 U	1.0 U	1.0 U	1.0 U
	2/14/2018	5.0 U	1.0 U	1.0 U	4.3	1.0 U	2.8	5.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	5.0 U	1.0 U	1.0 U	6.1	1.0 U	2.4	5.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	6.9	1.0 U	2.3	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	5.2	1.0 U	3.5	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	6.1	1.0 U	3.9	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	4.0	1.0 U	3.4	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	**7.6**	1.0 U	4.2	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	**10.0**	1.0 U	4.3	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	**8.1**	1.0 U	**5.1**	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	4.0	1.0 U	2.1	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	6.2	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	**8.3**	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	**13.3**	1.0 U	3.8	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	**13.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	**12.2**	1.0 U	4.6	1.0 U	1.0 U	1.0 U	1.0 U
MW-29D	5/21/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	2/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-30D-273	5/31/2018	5.0 U	1.0 U	1.0 U	**27.4**	1.0 U	**16.4**	5.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	5.0 U	1.0	1.0 U	**40.7**	1.0 U	**24.5**	5.0 U	1.7	1.0 U	1.0 U
	11/8/2018	5.0 U	1.2	1.0 U	**44.0**	1.0 U	**22.2**	5.0 U	2.1	1.0 U	1.0 U
	2/19/2019	1.0 U	1.1	1.0 U	**47.2**	1.0 U	**23.1**	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.1	1.0 U	**44.2**	1.0 U	**22.7**	5.0 U	2.0	1.0 U	1.0 U
	11/20/2019	1.0 U	1.1	1.0 U	**43.3**	1.0 U	**22.8**	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0	1.0 U	**42.7**	1.0 U	**20.9**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0	1.0 U	**39.5**	1.0 U	**19.5**	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0	1.0 U	**36.9**	1.0 U	**18.2**	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0	1.0 U	**34.1**	1.0 U	**16.6**	5.0 U	1.4	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	**34.5**	1.0 U	**7.5**	1.0 U	1.3	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	**31.3**	1.0 U	**7.0**	1.0 U	1.2	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	**35.1**	1.0 U	**8.0**	1.0 U	1.4	1.0 U	1.0 U
	12/4/2023	1.0 U	1.3	1.0 U	**51.0**	1.0 U	**9.6**	1.0 U	1.7	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	**30.6**	1.0 U	**7.1**	1.0 U	1.3	1.0 U	1.0 U
	11/11/2024	1.0 U	1.3	1.0 U	**50.7**	1.0 U	**11.7**	1.0 U	1.7	1.0 U	1.0 U
MW-31D	3/17/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	6/24/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/22/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	1/6/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/21/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	7/19/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/6/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	2/14/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/31/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/2/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
	Groundwater Quality Standard (µg/L)	NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-31D	11/21/2022	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	6/12/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/26/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-32D	5/31/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	2/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	5/20/2024	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-33D-235	3/18/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/21/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	1/4/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/21/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U
	7/18/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.3	**12.0**	1.0 U	1.0 U	1.0 U
	2/13/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/31/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
	Groundwater Quality Standard (µg/L)	NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-33D-295	3/18/2015	1.0 U	1.0 U	1.0 U	4.6	1.0 U	**8.0**	2.0 U	1.0 U	1.0 U	1.0 U
	6/23/2015	1.0 U	1.0 U	1.0 U	3.3	1.0 U	**6.8**	2.0 U	1.0 U	1.0 U	1.0 U
	9/21/2015	1.0 U	1.0 U	1.0 U	4.8	1.0 U	**6.8**	2.0 U	1.0 U	1.0 U	1.0 U
	1/4/2016	1.0 U	1.0 U	1.0 U	3.7	1.0 U	**7.6**	2.0 U	1.0 U	1.0 U	1.0 U
	3/21/2016	1.0 U	1.0 U	1.0 U	3.9	1.0 U	**7.8**	2.0 U	1.0 U	1.0 U	1.0 U
	7/18/2016	1.0 U	1.0 U	0.36 J	3.2	1.0 U	**5.1**	2.0 U	1.0 U	1.0 U	1.0 U
	9/7/2016	1.0 U	1.0 U	1.0 U	3.8	1.0 U	**7.4**	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	5.4	1.0 U	**7.4**	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	4.0	1.0 U	**6.8**	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	5.3	1.0 U	**7.4**	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	5.6	1.0 U	**6.3**	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	3.4	1.0 U	**9.7**	**11.5**	0.49 J	1.0 U	1.0 U
	2/13/2018	5.0 U	1.0 U	1.0 U	4.6	1.0 U	**6.9**	2.0 U	0.49 J	1.0 U	1.0 U
	5/31/2018	5.0 U	1.0 U	1.0 U	4.6	1.0 U	**6.9**	2.0 U	0.49 J	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	4.2	1.0 U	**6.1**	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	4.5	1.0 U	**6.1**	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	3.7	1.0 U	**6.3**	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	4.4	1.0 U	**6.0**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	3.6	1.0 U	**6.0**	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	4.4	1.0 U	**5.6**	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	4.2	1.0 U	**6.1**	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	5.1	1.0 U	3.0	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	6.0	1.0 U	3.1	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	6.8	1.0 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	**8.9**	1.0 U	3.3	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	6.7	1.0 U	3.6	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	**9.2**	1.0 U	3.9	1.0 U	1.0 U	1.0 U	1.0 U

Appendix B

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
	Groundwater Quality Standard (µg/L)	NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-34D	5/31/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-35D	3/18/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	6/22/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/21/2015	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	1/6/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	4/15/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	7/18/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	9/6/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/21/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/31/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	2/14/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/31/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.16 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-46D	5/30/2018	1.0 U	13.7	1.0 U	**29.4**	1.0 U	**73.5**	2.0 U	1.2	1.0 U	1.0 U
	11/7/2018	1.0 U	22.1	1.2	**99.6**	1.0 U	**96.7**	2.0 U	7.7	1.0 U	1.0 U
	5/21/2019	1.0 U	**26.1**	1.0	**125**	1.0 U	**88.0**	5.0 U	10.2	1.0 U	1.0 U
	11/19/2019	1.0 U	**23.4**	1.4	**114**	1.0	**96.3**	5.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	**20.7**	1.4	**98**	1.0	**63.0**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	**18.4**	1.0 U	**124**	1.0 U	**29.8**	5.0 U	6.4	1.0 U	1.0 U
	5/9/2021	1.0 U	**25.7**	1.5	**116**	1.0 U	**99.3**	5.0 U	7.8	1.0 U	1.0 U
	11/15/2021	1.0 U	**19.9**	1.0 U	**87**	1.0 U	**79.9**	5.0 U	4.8	1.0 U	1.0 U
	6/27/2022	1.0 U	**20.7**	1.0 U	**92**	1.0 U	**23.4**	5.0 U	5.7	1.0 U	1.0 U
	11/21/2022	1.0 U	**15.7**	1.0 U	**74.9**	1.0 U	**40.1**	1.0 U	3.6	1.0 U	1.0 U
	5/21/2023	1.0 U	1.2	1.0 U	**19.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	**8.7**	1.0 U	**51.5**	1.0 U	**27.3**	1.0 U	1.6	1.0 U	1.0 U
	6/12/2024	1.0 U	**16.4**	1.0 U	**65.9**	1.0 U	**30.2**	1.0 U	2.4	1.0 U	1.0 U
	11/10/2024	1.0 U	**7.4**	1.0 U	**36.5**	1.0 U	**26.8**	1.0 U	1.2	1.0 U	1.0 U
Confined Patuxent Wells											
MW-30D-413	5/31/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 U	1.0 U	1.0 U	1.0 U	1.0 U

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Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
Groundwater Quality Standard (µg/L)		NE	2.8 (1)	5	7	70	4.6	5	200	5	5
MW-30D-413 (continued)	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-36D	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	8/23/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/8/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	2/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/20/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	5/10/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	11/15/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	6/27/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/21/2022	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/22/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	12/4/2023	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/20/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/11/2024	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

(1) MDE GW Quality Standard changed from 90 µg/L to 2.8 µg/L in October 2018

a/ U = not detected above the method detection limit; J = estimated concentration between the reporting limit and method detection limit.

Bolded values indicate an exceedence of the Groundwater Quality Standards

Dashed line marks change from quarterly to semi-annual sampling frequency at the well.

All sample concentrations in micrograms per liter (µg/l)

NS = well not sampled

b/ Wells screened in this portion of the Lower Patapsco aquifer were removed from the monitoring program after the May 2018 sampling event.

c/ Well decommissioned in August 2019