EMERSUB 16 LLC

2020 OFFSITE GROUNDWATER MONITORING REPORT

FORMER KOP-FLEX FACILITY SITE, HANOVER, MARYLAND

MAY 06, 2021

wsp

4817-1792-0480.v3

2020 OFFSITE GROUNDWATER MONITORING REPORT

FORMER KOP-FLEX FACILITY SITE, HANOVER, MARYLAND

EMERSUB 16 LLC

PROJECT NO.: 31401545.011
DATE: MAY 6, 2021

WSP
SUITE 300
13530 DULLES TECHNOLOGY DRIVE
HERNDON, VA 20171

TEL.: +1 703 709-6500
FAX: +1 703 709-8505
WSP.COM

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

APPENDIX A 2020 LABORATORY ANALYTICAL REPORTS

1 INTRODUCTION

On behalf of EMERSUB 16 LLC, WSP USA Inc. (WSP) has prepared this Annual Offsite Groundwater Monitoring Report for activities performed in 2020 to assess 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 response action activities that were 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 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 offsite areas beginning in 2012 also showed that solvent-derived volatile organic compounds (VOCs) and 1,4-Dioxane have migrated to the south and southeast within the deep confined zone of the Lower Patapsco aquifer underlying the former facility. Since that time, an offsite groundwater monitoring plan was developed in conjunction with the onsite response actions. 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 whether additional actions are warranted to protect the drinking water source used by some residential communities in the area.

This 2020 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 – 2020 Sampling Results
- Section 6 – Summary and Conclusions, including planned 2021 monitoring activities

2 SITE DESCRIPTION

The former Kop-Flex facility 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 facility owner/operator, and a small groundwater treatment facility operated by WSP in the west-central portion of the property (Figure 1). These buildings were constructed during re-development of the property in 2016. The property is bordered to the north by the Verizon maintenance facility; to the east and south by the Williams Scotsman facility, and to the west by undeveloped land along Stony Run (a tributary of the Patapsco River), a residential townhome development (Harmans Preserve), 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. Kop-Flex manufactured flexible couplings for the mechanical power transmission industry at the site. Manufacturing operations at the facility ceased in late 2012, with all equipment and machining lines subsequently removed from the Site. In December 2014, Emerson transferred the property to its wholly owned subsidiary EMERSUB 16 LLC in preparation for the divestiture of its Power Transmission Solutions business, of which Kop-Flex was a part. Subsequently, EMERSUB 16 sold the property to a third party, TC Harmans Road, LLC, a subsidiary of Trammell Crow Company (TC Harmans Road, LLC later reorganized as, or transferred the property to, Harmans Road Associates, LLC, which is also a subsidiary of Trammell Crow Company). During 2016 and early 2017, the property was repurposed for commercial use. The redevelopment involved the demolition of the Kop-Flex facility buildings and construction of two structures, designated the North Building and South Building, separated by a truck loading dock area. Paragon BioServices, a Baltimore-area biopharmaceutical company, began leasing the property in 2018 and modifying the building interiors for future operations. As of late 2019, Paragon BioServices has moved into the North Building and initiated business operations as a tenant of Harmans Road Associates. In addition, Paragon BioServices was acquired by Catalent Pharma Solutions (Catalent) in 2019. Harmans Road Associates was subsequently purchased by Catalent in January 2020. 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. 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 Facility
South	William Scotsman, beyond which is Maryland State Route 100	7539 Harmans Road	Mobile Trailer Distributor – 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 residential townhome community	-----	Open space and residences

3 ENVIRONMENTAL SETTING

3.1 TOPOGRAPHY AND SURFACE DRAINAGE

Anne Arundel County is located within the Atlantic Coastal Plain Physiographic Province. The Hanover area is situated approximately five 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 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 to the Site is Stony Run, which flows across the northwestern portion of the 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 GEOLOGY

Evaluation of the borehole lithologic data in light 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 offsite monitoring wells installed in 2014 and 2018 (Figure 2). Construction details for these wells are provided in Table 1. Based on this data, the following discussion provides an overview of the geologic conditions in the onsite and offsite areas.

The youngest deposits at the former facility property and adjacent parcels are a combination of Quaternary alluvial sediments associated with the depositional processes along the Stony Run drainage system and fill materials associated with historical site activities. Based on the boring logs, the maximum thickness of these deposits in this area is approximately 20 feet (Figure 2).

Lower Cretaceous litho-stratigraphic units underlie the Quarternary-age deposits down to an elevation of greater than -300 feet 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 (Lower Patapsco confining unit and Lower Patapsco aquifer)
- Arundel Clay (Arundel Clay confining unit)
- Patuxent Formation (Patuxent aquifer)

Specific information on the aquifers and Arundel Clay confining unit is provided in the following section.

3.3 LOCAL HYDROGEOLOGY

3.3.1 LOWER PATAPSCO AQUIFER

The Lower Patapsco aquifer extends over the entire area of interest, which extends from the Site south and east to the residential communities off the portion of Telegraph Road south of Reece Road and ranges in thickness from approximately 170 feet at the southern boundary of the former Kop-Flex property to approximately 320 feet in the residential areas south of Reece Road (Figure 2). Overall, the aquifer in the area of interest consists of a layered sequence of alternating sandy and clayey sediments with the layers dipping to the south and east.[1] The predominately sand 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.

Based on the correlation of the sandy and clayey deposits, 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. (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 deeper sand layer extends over the entire area of interest within the aquifer. 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 200 feet BGS in the area of the Andorick Acres community. The thickness of this unit exhibits a correlative spatial variation, with a maximum of approximately 90 feet in the northern portion of the area of interest and 160 feet further south. The fine-grained sediments comprising the clayey unit that overlies the deep sand layer serve as both a confining unit for this sand zone within the Lower Patapsco aquifer and a low permeability barrier limiting the flux of volatile constituents to the overlying portions of the aquifer. This results in contaminants reaching the deep sand layer at the former Kop-Flex facility and migrating downward (*i.e.*, increasing in depth) as they spread down gradient from the Site. Thus, contamination from the former Kop-Flex facility is not expected to be present in the shallow aquifer zones in the residential areas to the south of the Site.

At the Site, groundwater in the shallow sand units of the Lower Patapsco aquifer generally occurs under an unconfined condition, although locally semi-confined conditions may exist in areas where fine-grained clayey deposits are present in the shallow subsurface.[2] 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 zones of the Lower Patapsco aquifer in the area (Figure 3). These flow paths mimic the overall local surface topography with shallow groundwater providing a source of water (*i.e.*, baseflow) to local streams and discharge to wetland areas and surface water bodies near stream courses.

In the deeper sand unit of the Lower Patapsco aquifer, groundwater flow occurs under leaky confined conditions in the offsite area of the Site.[3] Evaluation of the water level data from the deep monitoring wells screened in the deep confined sand zone of the Lower Patapsco aquifer indicates generally south-southeast flow paths for groundwater moving through this portion of the aquifer (Figure 2).[4] (Further discussion of the groundwater flow system within the deep confined portion of the Lower

---

[1] 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.
[2] 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.
[3] A leaky aquifer is an aquifer whose upper and lower boundaries consist of continuous low permeability materials through which groundwater movement may occur.
[4] In this report, when a reference is made to 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 3.3.3).

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 of the Lower Patapsco aquifer are higher than elevations in the deep monitoring wells (Figure 2). This difference in the hydraulic head between the shallow and deep monitoring wells in these areas indicates the previously mentioned trait of a downward vertical component of groundwater flow across the clayey layer that separates the deep sand zone of the Lower Patapsco aquifer from overlying sandy deposits of the shallow zone of the aquifer.

The majority of the offsite monitoring wells for this project are screened within the deep, confined sand zone of the Lower Patapsco aquifer Currently, the only offsite monitoring well that is screened in the shallow zone of the Lower Patapsco aquifer is MW-45 on the William-Scotsman property.[5]

3.3.2 ARUNDEL CLAY

The Arundel Clay underlies the Lower Patapsco 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 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 (Figure 2). 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 45 feet to 130 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.

3.3.3 PATUXENT AQUIFER

The Patuxent aquifer is the deepest aquifer encountered in the 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 Based on regional hydrogeologic studies, the Patuxent aquifer is believed to approach a thickness of approximately 250 feet in northwestern Anne Arundel County. The depth and inferred thickness for the aquifer is supported by the construction details

[5] Monitoring wells MW-25 and MW-28 in the Harmans Woods community were also completed in the shallow sand zone. These wells were installed in the summer of 2014 and abandoned in place in the summer of 2019 following approval from MDE.

[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.

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.

Groundwater flow within the Patuxent aquifer occurs under 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 significant water 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 have continued through 2020. 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 – MW-30D-413 and MW-36D – are consistent with the eastward flow paths ascertained from the previous investigations. The data from these wells further suggests that the Arundel Clay is serving as a good aquitard, or low permeability barrier, between the Lower Patapsco and Patuxent aquifers.

4 GROUNDWATER MONITORING PLAN AND FIELD PROCEDURES

4.1 OVERVIEW OF GROUNDWATER SAMPLING ACTIVITIES

Offsite groundwater monitoring activities were conducted during the second and fourth quarters of 2020. The monitoring activities completed during these quarters involved the collection of groundwater quality samples from all or selected offsite monitoring wells, as well as collection of water level measurements. The locations of the offsite monitoring wells are shown in Figure 4. No groundwater monitoring activities were conducted during the first or third quarter of 2020. All activities were performed following WSP's standard operating procedures (SOP's) and the September 2015 Groundwater Monitoring Plan. Additional information regarding the semi-annual 2020 monitoring activities is provided below.

4.2 WATER LEVEL MEASUREMENTS

Field measurements at the offsite deep monitoring wells were made during each sampling event using an electronic water level indicator. However, water level was measured in MW-45 just once in 2020 (November). During the second quarter monitoring event, this well was covered by a large trailer and was inaccessible. Static water level and total well depth measurements were taken at each monitoring well to determine fluctuations in the hydraulic head within the portion of the aquifer system screened by the well and 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 2020 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 2020. The HydraSleeve™ is a passive/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. The samplers were installed in the wells following each previous sampling event.

A 2.5-foot (30-inch) long HydraSleeve™ sampler was attached to a weighted, nylon suspension tether and set at the pre-determined depth within the screened interval. The depth intervals for deployment of the HydraSleeve™ samplers in the offsite wells are provided in Table 3. The suspension line was secured at the well head to ensure the sampler remained at the designated depth during the stabilization period. Following equilibration, 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 sample immediately collected in the appropriate 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 2020 sampling events. There were some instances where the HydraSleeve™ did not provide enough groundwater for the field parameter measurements. These occurrences are marked as "not measured" in Table 4.

Following sample collection, 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 Pace Analytical Services (Pace) laboratory in Huntersville, North Carolina for VOCs using U.S. EPA SW-846 Test Method 8260D. In addition, the samples were analyzed for 1,4-dioxane using modified U.S. EPA Method 8260D with selected ion monitoring (SIM). These test methods were also used for field quality control (QC) samples – i.e., trip blanks and duplicate samples.

5 2020 GROUNDWATER MONITORING RESULTS

5.1 GROUNDWATER QUALITY STANDARDS FOR SITE-RELATED VOCS

The comparative criteria for all site-related COCs, excluding 1,4-dioxane, detected in the offsite groundwater are equivalent to the current (October 2018) MDE groundwater quality standards listed below.

- 1,1,1-Trichloroethane (TCA) – 200 micrograms per liter (µg/l)
- 1,1-Dichloroethene (DCE) – 7 µg/l
- 1,2-Dichloroethane (DCA) – 5 µg/l
- 1,1-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. 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 1E-5, MDE has used a calculated risk-based groundwater criterion for 1,4-dioxane of 4.6 µg/l with respect to the plume emanating from the former Kop-Flex facility property. WSP has used this risk-based level to evaluate the extent of impacted groundwater for the offsite area.

The following sections discuss the analytical results for each sampling event, with the primary focus on the site-related COCs listed above. The historical analytical results for all offsite monitoring wells through the 2020 sampling events are summarized in Table 5. The results for groundwater samples collected from the deep monitoring wells in 2020 are shown on Figure 5. Certified laboratory reports provided by Pace for each sampling event are included in Appendix A.

5.2 RESULTS OF SEMI-ANNUAL SAMPLING EVENTS

5.2.1 MAY 2020

All deep monitoring wells screened in the deep sand zone of the Lower Patapsco aquifer, except for MW-31D, were sampled on either May 12 or May 14, 2020, using a HydraSleeve™ sampler that had been deployed following the previous sampling of each well in November 2019. WSP was not able to access MW-31D during this time period to collect a groundwater sample because a vehicle was parked over the well. Therefore, WSP returned to the offsite area on June 2, 2020, to complete the sampling of this well. In addition, no sample was collected from shallow monitoring well MW-45 on the William

Scotsman property because a large construction trailer was present over the well, rendering it inaccessible. WSP decided to postpone collecting a sample from this well until the November sampling event.

A potentiometric surface contour map for the deep, confined portion of the Lower Patapsco aquifer is provided in Figure 6 using the water level data obtained during the May 2020 sampling activities. The potentiometric surface contours show that the groundwater flow direction in the deep, confined zone of the Lower Patapsco aquifer (south-southeast direction) differs from the flow direction in the shallow zone of the aquifer, which flows to the northwest toward the Stony Run. The water level measurement from MW-31D was not used in generating the contours since this measurement was not obtained on the same day as data from the other deep offsite monitoring wells. The potentiometric contours show the hydraulic influence of the groundwater withdrawals from deep recovery wells RW-1D and RW-2D extends southward across the William-Scotsman property to the Maryland State Route 100 roadway. Beyond this pumping-induced drawdown area, the overall direction of groundwater flow, in the deep confined portion of the Lower Patapsco aquifer is to the south/southeast from the site area. This flow direction is similar to the data collected during previous events.

Overall, the analytical data indicates the presence of site-related constituents in the deep zone of the Lower Patapsco aquifer just over one mile hydraulically downgradient (south) of the former Kop-Flex property. It should be noted that site-related COCs were also detected in the sample from well MW-46D, which is screened in the deep zone of the Lower Patapsco aquifer on the Verizon property north of the former Kop-Flex facility, with a total COC concentration of 183 micrograms per liter (µg/l). The sample from this monitoring well had concentrations of 1,1-DCE; 1,1-DCA; and 1,4-dioxane above their respective comparative groundwater quality criteria (Figure 5).

In the offsite area to the south of the Site, the sample from monitoring well MW-24D screened in the deep zone of the Lower Patapsco aquifer on the adjoining Williams-Scotsman property had the highest concentration of site-related COCs (573 µg/l), although this level is significantly lower than that detected in the November 2019 event (1,094 µg/l). Further downgradient in the deep zone of the Lower Patapsco aquifer, a total concentration of site-related COCs of 105 µg/l was detected in the MW-25D-130 sample, which is similar to the concentrations in the sample (107.1 µg/l) and duplicate (100.2 µg/l) from the deeper well (MW-25D-192) at this location. The concentrations of 1,1-DCE; 1,1-DCA; and 1,4-dioxane all exceeded their respective comparative criteria in the samples from well MW-24D and the MW-25D well pair in the northeast corner of the Harmans Woods community (Figure 5).

The sampling data for monitoring wells screened in the deep zone of the Lower Patapsco aquifer south of the MW-25D well pair indicated COC concentrations that were non-detect or below regulatory criteria (Figure 5). The main exception is the sample from the well screened in the lower portion of the deep zone (263 to 273 ft BGS) at the MW-30D location near the intersection of Old Camp Meade Road and Twin Oaks Road. The groundwater sample from this well (MW-30D-273) had concentrations of 1,1-DCE (42.7 µg/l) and 1,4-dioxane (20.9 µg/l) above their respective groundwater quality criteria. In addition, the concentration of 1,4-dioxane in the sample from deep zone well MW-33D-295 (6.0 µg/l), which is located in the southern part of the Andorick Acres community, also exceeded the comparative criteria.

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

5.2.2 NOVEMBER 2020

Groundwater samples and water level measurements were collected from all monitoring wells screened in the deep (confined) zone of the Lower Patapsco aquifer and Patuxent aquifer on November 22-23, 2020. WSP had to return to the Site on December 8, 2020 to sample shallow well MW-45 on the William-Scotsman property because the well was covered by a construction trailer during the November sampling activities.

No COCs were detected in the sample from shallow zone well MW-45. This finding is consistent with information discussed above, regarding the unlikelihood of site-related COCs migrating offsite in the shallow zone of the Lower Patapsco aquifer to the south of the Site.

A potentiometric surface contour map for the deep zone of the Lower Patapsco aquifer is shown in Figure 7 using the water level data obtained during the November 2020 sampling activities. Although the potentiometric contour maps indicate similar flow paths, or hydraulic gradient directions, in the deep zone of the Lower Patapsco aquifer system, the magnitude of the hydraulic gradient is higher in November 2020 compared to the May 2020 measurement event, particularly in the area between Maryland Route 100 and Reece Road (Maryland Route 174). The increased hydraulic gradient from May to November is associated with a noticeable decline in the potentiometric heads within the lower portion of this aquifer flow zone, with reductions of greater than 10 feet in the monitoring wells located furthest downgradient (e.g., MW-30D-273, MW-33D-295, and MW-34D). Similar to the May 2020 event, the potentiometric surface contours once again show that the groundwater flow direction in the deep, confined zone of the Lower Patapsco aquifer (south-southeast direction) differs from that in the shallow zone of the aquifer which flows toward the northwest.

In general, the concentrations of site-related VOCs and 1,4-dioxane in the groundwater samples collected from monitoring wells screened in the deep zone of the Lower Patapsco aquifer are consistent with the levels detected during the May 2020 sampling event. As with the previous 2020 monitoring event, site-related COCs were detected in the sample collected from well MW-46D on the Verizon property. The total COC concentration in the November 2020 sample (178.6 µg/l) is very similar to the level from the May 2020 event (183.1 µg/l). The sample from this monitoring well had concentrations of 1,1-DCE; 1,1-DCA; and 1,4-dioxane above their respective comparative groundwater quality criteria (Figure 5).

To the south of the former Kop-Flex property, the analytical data for samples from wells completed in the deep zone of the Lower Patapsco aquifer indicate the presence of site-related constituents hydraulically downgradient to the Andorick Acres community (Figure 5). The sample from deep zone monitoring well MW-24D on the Williams-Scotsman property once again had the highest concentration of site-related COCs (794.2 µg/l), which is higher than the May 2020 sampling event (573 µg/l). The more pronounced variability in COC concentrations in samples from this well compared to the other offsite monitoring wells screened in the deep sand zone of the Lower Patapsco aquifer is believed to be largely due to the effects of groundwater withdrawals by the deep onsite recovery wells (RW-1D and RW-2D). Further to the south of the site, a total concentration of site-related COCs of 116.6 µg/l was detected in the sample from well MW-25D-130, which is screened in the upper portion of the Lower Patapsco aquifer deep sand zone. This total COC concentration is similar to the concentration (105.5 µg/l) in the sample from well MW-25D-192 completed in the lower portion of the deep zone at this location. The concentrations of 1,1-DCE; 1,1-DCA; and 1,4-dioxane exceeded their respective comparative criteria in the samples from MW-24D and the MW-25D well pair (Figure 5).

The majority of the sampling data for the Lower Patapsco aquifer deep zone monitoring wells situated downgradient (south) of the MW-25D location indicated non-detect to very low concentrations of site-related COCs (Figure 5). As with the previous monitoring event, the main exception is the sample collected from MW-30D-273, which is screened in the lower portion of the deep sand zone near the intersection of Old Camp Meade Road and Twin Oaks Road. The groundwater sample from this well had concentrations of 1,1-DCE (39.5 µg/l) and 1,4-dioxane (19.5 µg/l) above their respective groundwater quality criteria. In addition, other samples from Lower Patapsco aquifer deep zone wells that had COC concentrations exceeding the comparative criteria included 1,1-DCE (7.6 µg/l) at the MW-28D location in the southern portion of the Harmans Woods community and 1,4-dioxane (6.0 µg/l) in the sample from the deeper well at location MW-33D in the Andorick Acres neighborhood.

Consistent with the May 2020 sampling event, no site-related VOCs or 1,4-dioxane were detected in the samples from wells MW-36D and MW-30D-413 location screened in the Patuxent aquifer. These results indicated COCs had not migrated downward through the Arundel Clay confining unit overlying the Patuxent aquifer.

6 SUMMARY AND CONCLUSIONS

6.1 COC DISTRIBUTION

Based on analytical data, the offsite occurrence of VOCs and 1,4-dioxane derived from historical releases at the site is limited to the deep zone of the Lower Patapsco aquifer. The concentrations of the site-related VOCs and 1,4-dioxane were generally consistent throughout all 2020 monitoring events. Well MW-24D, which is the closest deep zone monitoring point to the recovery wells screened in the screened in the deep zone of the Lower Patapsco aquifer, offers the only exception to the constancy in detected COC levels. After a noticeable decline in total VOC concentrations in the MW-24D samples collected from the second quarter 2019 to the second quarter 2020, there was a slight increase in the fourth quarter 2020. However, the total VOCs, and particularly the concentrations of 1,1-DCE and 1,4-dioxane, were still much lower in the November 2020 sample compared to the 2019 data.

The iso-concentration maps shown in Figures 8 and 9, depict the inferred horizontal extent of the 1,1 DCE and 1,4-dioxane plumes within the deep zone of the Lower Patapsco aquifer based on the November 2020 sampling data. These iso-concentration maps also include data for the deep zone monitoring wells in the onsite area in order to provide a better understanding of the overall constituent distribution within this portion of the aquifer. Based on the data from well MW-46D, the northern boundaries of the plume areas in the deep zone of the Lower Patapsco aquifer extends onto the Verizon property. In the area south of MD Route 100, the inferred extents of these COCs within the Lower Patapsco aquifer deep zone are similar to the distributions determined from the 2019 monitoring data. The deep zone wells containing the highest site-related VOC 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 former Kop-Flex facility. The only other deep zone monitoring wells that consistently had 1,1 DCE and/or 1,4-dioxane concentrations above the applicable groundwater quality criteria in the 2020 samples were MW-30D-273 and MW-33D-295. Wells MW-25D, MW-30D and MW-33D are presumed to be located along the centerlines of the 1,1-DCE and 1,4-dioxane plumes. The sample results for wells MW-29D, MW-31D, MW-32D, MW-34D and MW-35D are used to delineate the width and downgradient extent of the plume areas in the deep zone of the Lower Patapsco aquifer. Based on the analytical data from MW-33D, the downgradient extent of the deep zone 1,4-dioxane plume (Figure 9) extends further southeast than the commingled 1,1-DCE plume (Figure 8). One minor difference in the width of the 1,1-DCE plume is due to the detection of 1,1-DCE at a concentration slightly above the groundwater quality standard of 7 µg/l in MW-28D from the November 2020 sampling event. This rare exceedance of the 1,1-DCE criterion at this well location indicates a slight variability in the western plume boundary in the area between Route 100 and Severn Station Road-Old Camp Meade Road. Given the COC distributions shown in the iso-concentration maps, the majority of impacted groundwater in the deep zone of the Lower Patapsco aquifer south of Route 100 is characterized by diffuse plumes with relatively low contaminant concentrations.

As mentioned above, evaluation of the sampling data indicates the permeable sand deposits comprising the deep zone of the Lower Patapsco aquifer represents the primary hydro-stratigraphic interval for the offsite migration of COCs from the former Kop-Flex facility. Site-related COCs have not been identified – nor are they expected to be identified – in the offsite portion of the shallow zone of the Lower Patapsco aquifer to the south of the Site. Historical water level data from the offsite monitoring wells consistently indicated a downward vertical flow component within the Lower Patapsco aquifer, and from the Lower Patapsco aquifer to the underlying Patuxent aquifer. This vertical head difference also appears to be present, albeit at a significantly smaller magnitude, between the sandy beds within the deep zone, as indicated by the water level (Table 2) and water quality (Table 5) data for the MW-33D well pair. This data implies that dissolved contaminants will tend to migrate downward from the upper to lower portion of the deep zone of the Lower Patapsco aquifer. (The MW-25D well pair does not exhibit this characteristic to the same extent as the MW-33D wells, although this difference may be attributed to

placement of the screened interval for the MW-25D-192 well.) Even with this downward flow component, 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. Based on the sampling data, the Arundel Clay unit is effectively limiting the vertically downward, migration of the site-related COCs, thereby restricting their transport to the sandy deposits comprising the deep zone of the Lower Patapsco aquifer.

6.2 COC CONCENTRATION PLOTS

Figures 10 through 15 include graphs that show concentrations of 1,1-DCE and 1,4-dioxane with respect to time (2016 through 2020) for monitoring wells screened in the deep zone of the Lower Patapsco aquifer. The selected wells are located along the center-line of the groundwater plume. These plots were developed to help elucidate temporal trends in concentrations for these primary COCs within the impacted portion of the aquifer.

The data presented in the concentration vs. time plots are for groundwater samples collected using different methods. The low-flow sampling procedure was utilized to collect monitoring well samples through the third quarter of 2016. Given the applicability of the HydraSleeve™ sampler determined from the spring/summer 2016 field demonstration study, the use of this passive sampling device was adopted in place of the low-flow sampling method. The conversion from the low flow to passive (HydraSleeve™) method was implemented during the fourth quarter 2016 monitoring event. Since constancy in sampling-related variables is important when evaluating temporal changes in COC concentrations, the qualitative assessment of trends in 1,1-DCE and 1,4-dioxane levels in monitoring well samples only considers data for samples obtained using the HydraSleeve™ sampler (i.e., fourth quarter 2016 through 2020).

Since the start-up of the onsite hydraulic containment system (System) in early 2017, COC concentrations in samples have exhibited stable trends in some plume wells, while other wells show a decrease in concentrations of 1,1 DCE and 1,4-dioxane. The data for MW-24D (Figure 10), which is the closest deep zone monitoring point to the deep recovery wells, showed a slight spike in 1,1-DCE and 1,4-dioxane concentrations in the May 2019 sample. Subsequent samples indicate a decrease in COC concentrations from the November 2019 through 2020, with levels from both 2020 sampling events reverting to concentrations detected in 2018. Overall, the sampling results to date suggest no apparent trend in the 1,1-DCE or 1,4-dioxane concentrations following the onset of System operation. At the MW-25D location, well MW-25D-130, which is screened in the upper portion of the Lower Patapsco aquifer deep zone, has exhibited a decreasing trend for 1,1-DCE and 1,4-dioxane from 2017 through 2019, with detections of these COCs in the 2020 samples suggesting a leveling-off of this trend (Figure 11). Data for the sample from well MW-25D-192, which is completed in the lower portion of the deep zone, also shows a slight declining trend over the 2017-2020 time period (Figure 12). These wells are two of the closer monitoring points to the deep groundwater recovery wells and are screened in the same zone of the Lower Patapsco aquifer. The decreasing concentration trends indicated by the MW-25D well pair samples are believed to be related to the extraction of COC-containing groundwater by the System. Thus, the temporal changes in the COC levels suggests pumping from the deep recovery wells is successfully preventing further offsite migration of site-related VOCs within the deep zone of the Lower Patapsco aquifer.

Generally stable 1,1-DCE and 1,4-dioxane concentration trends are indicated by the sample data from wells MW-33D-295 and MW-30D-273 (Figures 13 and 14 respectively), which are situated closer to the leading edge of the groundwater plume in the deep zone of the Lower Patapsco aquifer. These results indicate the plume has likely reached a stable, or steady-state, condition in this area of the aquifer. Analytical data shows concentrations from MW-30D-273 increased after the initial sampling event in May 2018 but have stabilized in the following events to date. The 'jump' in concentrations could be related to the initial sampling event (May 2018) taking place shortly after the well was installed in April 2018, in which case

the hydrogeochemical conditions in the vicinity of the well borehole had not yet returned to a natural (pre-drilling) state. The stable VOC concentrations in samples collected from August 2018 through 2020 further suggest the likelihood of a short-term impact to the aquifer chemistry around the borehole during well installation.

The sampling data for deep zone well MW-46D, which is located on the Verizon property north of the site, has not shown a discernable trend in the 1,1-DCE concentrations. However, the concentrations of 1,4-dioxane have shown a very clear and consistent decrease in the 2020 samples (Figure 15). The initial "jump" in concentrations from the May 2018 sample to the November 2018 sample could be a result of the same drilling effect that was manifested in the data for well MW-30D-273. WSP will continue to evaluate data from this monitoring well to further assess trends in the COC concentrations in the deep zone of the Lower Patapsco aquifer in this portion of the offsite area.

6.3 PLANNED 2021 OFFSITE GROUNDWATER MONITORING ACTIVITIES

From the spring of 2019 to the present, WSP has collected semi-annual water level data and groundwater samples from the 16 off-property monitoring wells completed in the deep zone of the Lower Patapsco aquifer and the underlying Patuxent aquifer. The collection of water level readings and groundwater quality samples will continue at a semi-annual frequency during the 2021 calendar year is accordance with the procedures described in Section 5 of this report. WSP believes the existing well network is sufficient to monitor the distribution of site-related COCs in the offsite areas affected by releases at the former Kop-Flex facility property.

The groundwater monitoring activities in 2021 will be conducted during the second and fourth quarters. Samples will be collected from all offsite monitoring wells (excluding shallow well MW-45) in the second quarter and from all offsite wells in the fourth quarter. No sampling or water level measurement activities are currently planned for the first and third quarters of 2021.

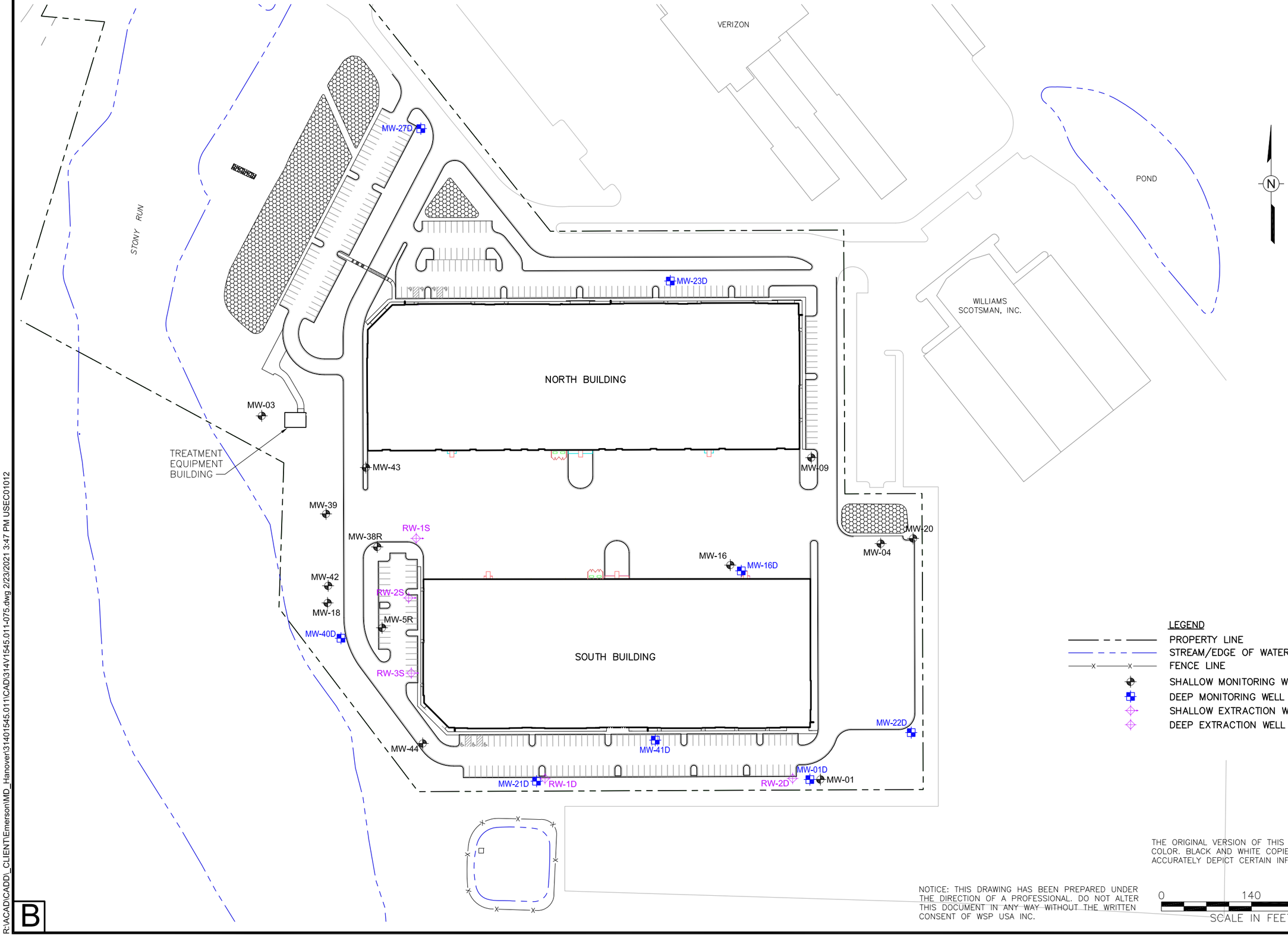
7 ACRONYMS

BGS	Below Ground Surface
COC	Constituent of Concern
DCA	Dichloroethane
DCE	Dichloroethene
GWMP	Groundwater Monitoring Plan
MCL	Maximum Contaminant Levels
MDE	Maryland Department of the Environment
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.
- WSP USA (May 2020) Quarterly Offsite Report NO. 14 – Offsite Area, Former Kop-Flex Facility Site (January 2020 through March 2020).
- WSP USA (August 2020) Quarterly Offsite Report NO. 15 – Offsite Area, Former Kop-Flex Facility Site (April 2020 through June 2020).
- WSP USA (January 2021) Quarterly Offsite Report NO. 16 – Offsite Area, Former Kop-Flex Facility Site (October 2020 through December 2020).
- WSP USA (June 2020) 2020 Offsite Groundwater Monitoring Report, Former Kop-Flex Facility Site, Hanover, MD.

FIGURES



NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

Drawn By: EGC
Checked: CC 2/23/2021
Approved: PM
DWG Name: 314V1545.011-075

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 1
SITE LAYOUT

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

B

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\314015545.011\CAD\314V1545.011-075.dwg 2/23/2021 3:47 PM USEC01012

LEGEND

PROPERTY LINE

STREAM

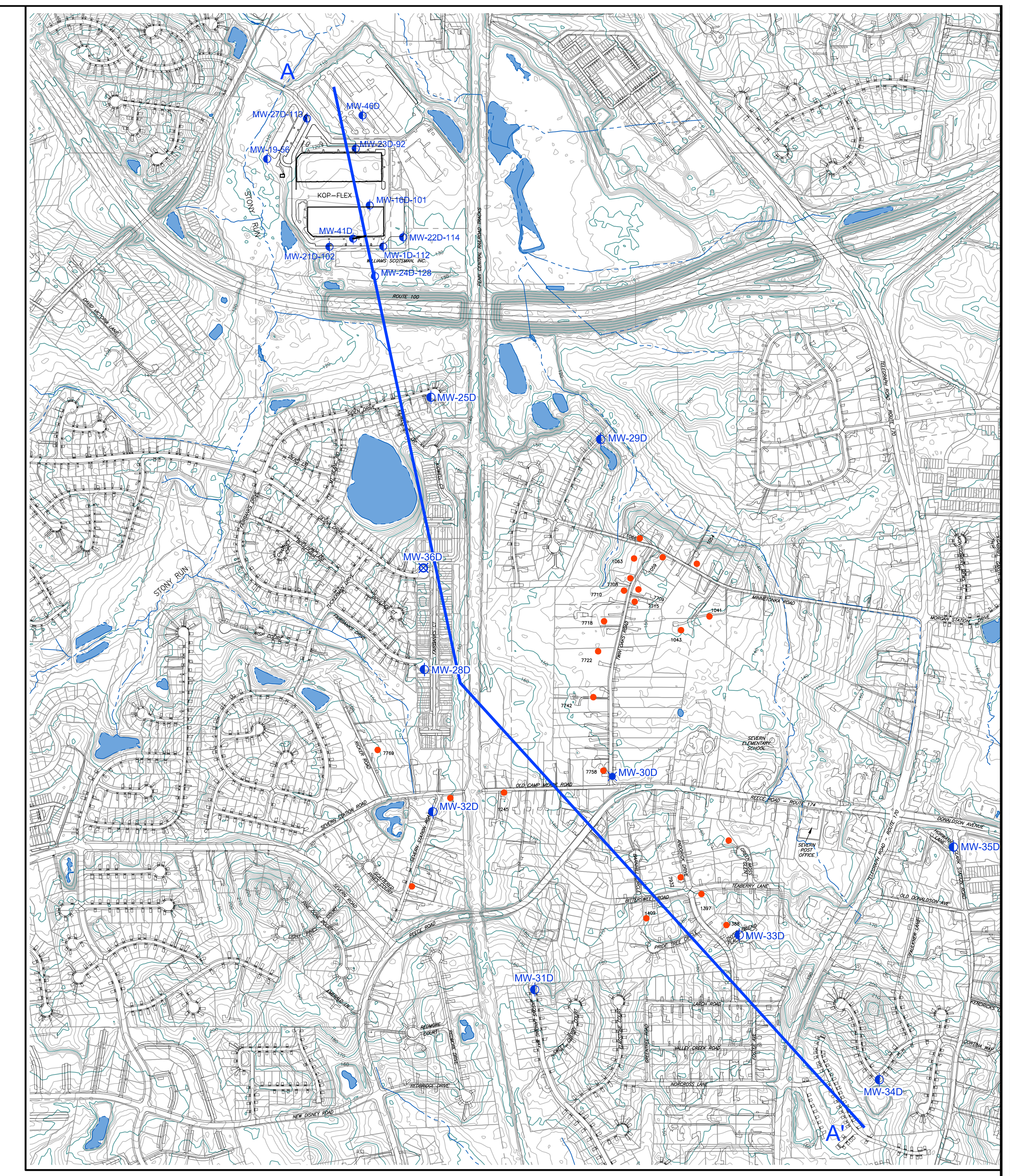
WATER BODY

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 LOCATION MAP

SCALE: 1"=800'

CROSS–SECTION LEGEND

SAND

INTERLAYERED SAND AND CLAY

CLAY

FILL MATERIAL

PIEZOMETRIC HEAD IN SHALLOW PORTION OF LOWER PATAPSCO AQUIFER

POTENTIOMETRIC HEAD IN DEEP/CONFINED PORTION OF LOWER PATAPSCO AQUIFER

BOREHOLE

SCREEN

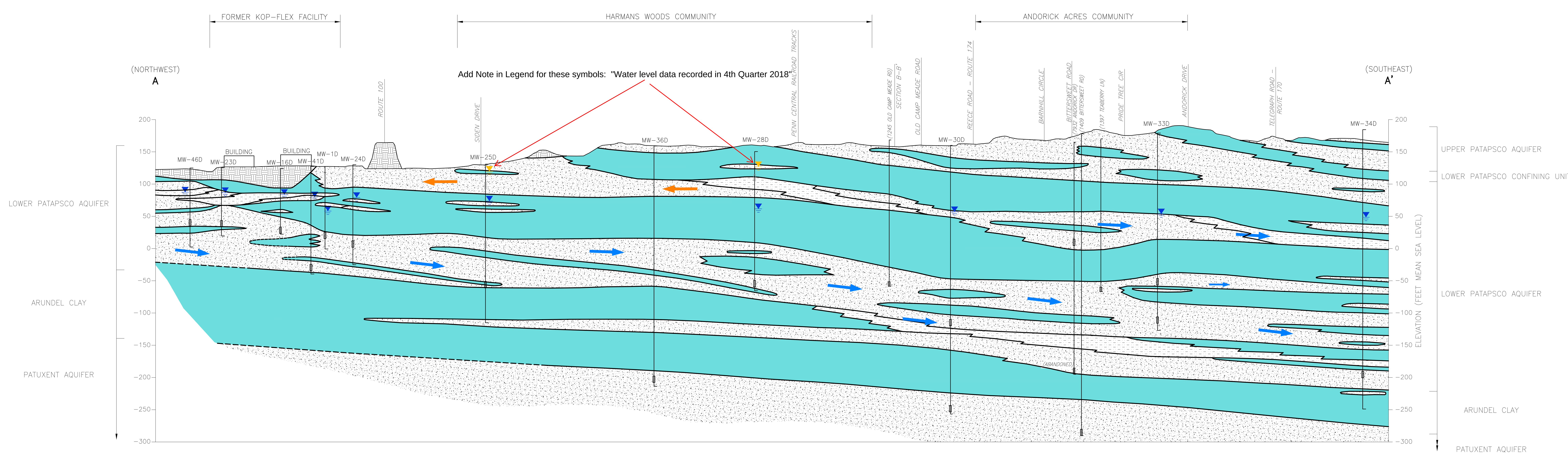
DECOMMISSIONED WELL

END OF BOREHOLE

GROUNDWATER FLOW DIRECTION – DEEP/CONFINED PORTON OF LOWER PATAPSCO AQUIFER

GROUNDWATER FLOW DIRECTION – 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.



0 80 160 320

VERTICAL SCALE IN FEET

0 400 800 1200

HORIZONTAL SCALE IN FEET

VE=5

80

400

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

D

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-073.dwg 2/16/2021 9:44 AM USEC01012

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

SEAL

DATE

DRAWN BY	EGC
CHECKED	MML/CC
APPROVED	[signature] 2/16/2021

HYDROGEOLOGIC CROSS–SECTION AND CONCEPTUAL MODEL OF GROUNDWATER FLOW SYSTEM

KOP–FLEX VCP 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 2

Drawing Number
314V1545.011–073

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

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. WELLS MW-25 AND MW-28 WERE ABANDONED IN AUGUST 2019

0 600 1200
SCALE IN FEET

B 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/

Drawn By: EGC
Checked:
Approved: RKG 2/11/2021
DWG Name: 314V1545.011-074

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

Figure 3

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

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

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

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

MW-27D MW-46D MW-23D MW-16D MW-45 MW-40D MW-41D MW-22D MW-21D MW-1D MW-24D MW-25D MW-29D MW-36D MW-28D MW-30D MW-32D MW-35D MW-33D MW-31D MW-34D

HARMANS WOODS ANDORICK ACRES

STONY RUN

WILLIAMS SCOTSMAN, INC.

ROUTE 100

PENN CENTRAL RAILROAD TRACKS

WATER LINE EXTENSION

MANANTICA ROAD

SEVERN ELEMENTARY SCHOOL

SEVERN POST OFFICE

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/

0 800 1600

SCALE IN FEET

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

Drawn By: EGC
Checked:
Approved: RG 2/16/2021
DWG Name: 314V1545.011-015

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

Figure 4

OFFSITE MONITORING WELL LOCATIONS
IN LOWER PATAPSCO AQUIFER AND
PATUXENT AQUIFER

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

R:\ACADICADD_CLIENT\Emerson\MD_Hanover\314O1545.011\CAD\314V1545.011-015.dwg 2/16/2021 9:44 AM USEC01012

MW-46D		
	May-20	Nov-20
1,1-DCA	20.7	18.4
1,2-DCA	1.4	ND
1,1-DCE	98	124
1,4-Dioxane	63	29.8
1,1,1-TCA	ND	6.4

MW-24D		
	May-20	Nov-20
1,1-DCA	25	73.5
1,2-DCA	3.3	ND
1,1-DCE	402	505
1,4-Dioxane	139	208
1,1,1-TCA	3.7	4.4

MW-25D	May-20		Nov-20	
	120-130'	182-192'	120-130'	182-192'
1,1-DCA	3.3	12.8	3.3	11.3
1,2-DCA	ND	ND	ND	ND
1,1-DCE	69.1	58	76	46.9
1,4-Dioxane	32.6	41.1	32.4	41.5
1,1,1-TCA	ND	ND	4.9	5.8

MW-29D		
	May-20	Nov-20
	141-151'	141-151'
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		
	May-20	Nov-20
	350-360'	350-360'
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		
	May-20	Nov-20
	200-210'	200-210'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	4	7.6
1,4-Dioxane	3.4	4.2
1,1,1-TCA	ND	ND

MW-30D	May-20		Nov-20	
	263-273'	403-413'	263-273'	403-413'
1,1-DCA	ND	ND	ND	ND
1,2-DCA	ND	ND	ND	ND
1,1-DCE	42.7	ND	39.5	ND
1,4-Dioxane	20.9	ND	19.5	ND
1,1,1-TCA	ND	ND	ND	ND

MW-32D		
	May-20	Nov-20
	226-236'	226-236'
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		
	May-20	Nov-20
	288-298'	288-298'
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-31D		
	Jun-20	Nov-20
	270-280'	270-280'
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	May-20		Nov-20	
	225-235'	285-295'	225-235'	285-295'
1,1-DCA	ND	ND	ND	ND
1,2-DCA	ND	ND	ND	ND
1,1-DCE	ND	4.4	ND	3.6
1,4-Dioxane	ND	6.0	ND	6.0
1,1,1-TCA	ND	ND	ND	ND

MW-34D		
	May-20	Nov-20
	375-385'	375-385'
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

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

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

LEGEND

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

MW-28D		
	May-20	Nov-20
	200-210'	200-210'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	4	7.6
1,4-Dioxane	3.4	4.2
1,1,1-TCA	ND	ND

- WELL IDENTIFICATION
- DATE
- SCREENED INTERVAL (FT-BGS)
- 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.

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

0 800 1600
SCALE IN FEET

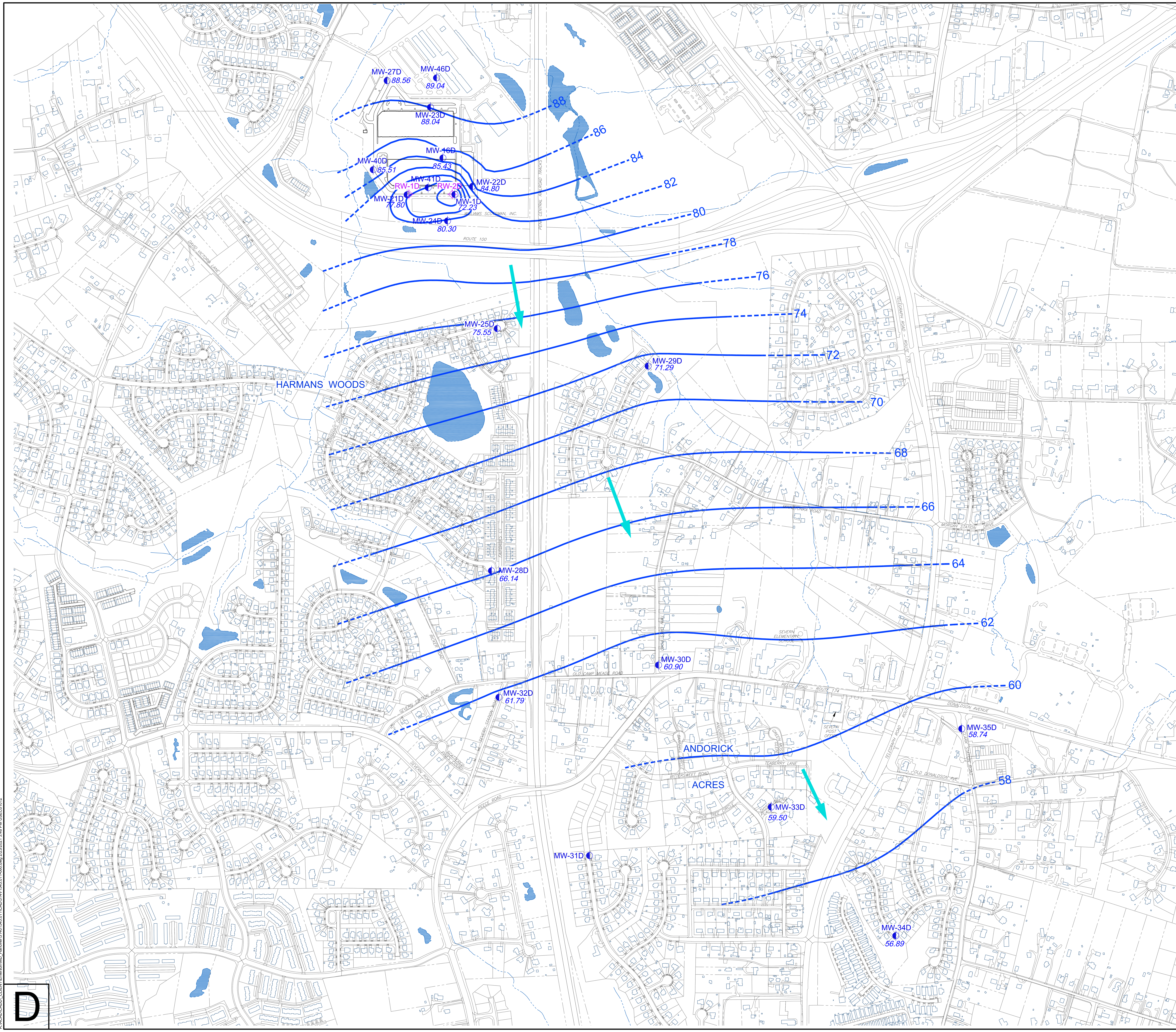
B

Drawn By: EGC
Checked: CC 2/23/2021
Approved: RG
DWG Name: 314V1545.011-068

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

Figure 5
OFFSITE DEEP MONITORING WELL
ANALYTICAL DATA - 2020

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



LEGEND

PROPERTY LINE
STREAM
WATER BODY
MONITORING WELL
RECOVERY WELL
72.18 GROUNDWATER SURFACE ELEVATION (FEET MSL)
GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
INFERRED GROUNDWATER FLOW

NOTE:

FIGURE DEPICTS THE POTENTIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER.

REVISIONS

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

SEAL

DATE

DRAWN BY EGC
CHECKED CC 2/23/2021
APPROVED

POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED PORTION OF THE LOWER PATAPSCO AQUIFER
MAY 2020

FORMER KOP–FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

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

FIGURE 6

Drawing Number
314V1545.011–060

0 400 800 1200
SCALE IN FEET

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

LEGEND

PROPERTY LINE

STREAM

WATER BODY

MONITORING WELL

RECOVERY WELL

72.18 GROUNDWATER SURFACE ELEVATION (FEET MSL)

GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)

INFERRED GROUNDWATER FLOW

NOTE:

FIGURE DEPICTS THE POTENTIOMETRIC SURFACE IN THE DEEP (CONFINED) ZONE OF THE LOWER PATAPSCO AQUIFER.

MW-27D 86.58
MW-46D 87.05
MW-23D 85.98
MW-16D
MW-40D 83.13
MW-41D
RW-1D
RW-2D
MW-22D 82.30
MW-21D 75.93
MW-1D 69.49
MW-24D 76.08
WILLIAMS - COTSMAN, INC.
ROUTE 100
PERU CENTRAL RAILROAD TRACKS
MW-25D 70.00
MW-29D 64.15
HARMANS WOODS
TELEGRAPH ROAD
MINNETONKA ROAD
MORGAN STATION ROAD
MW-28D 57.63
MW-30D 50.41
OLD CAMP MEADE ROAD
SEVERN ELEMENTARY SCHOOL
REECE ROAD
ROUTE 174
DOBSON AVENUE
MW-32D 52.34
SEVERN POST OFFICE
MW-35D 48.13
ANDORICK
ACRES
TEABERRY LANE
OLD DOBSON AVE
MW-33D 48.39
MW-31D 49.20
MW-34D 44.82
86 84 82 80 78 76 74 72 70 68 66 64 62 60 58 56 54 52 50 48 46

N

0 400 800 1200
SCALE IN FEET

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

D

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\314V1545.011\CAD\314V1545.011-067.dwg 2/16/2021 8:37 PM USEC01012

REVISIONS

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

SEAL

DATE

DRAWN BY ECC 1/21/2021
CHECKED
APPROVED

NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DRAWING IN ANY WAY.

POTENTIOMETRIC SURFACE CONTOUR MAP DEEP CONFINED PORTION OF THE LOWER PATAPSCO AQUIFER NOVEMBER 2020

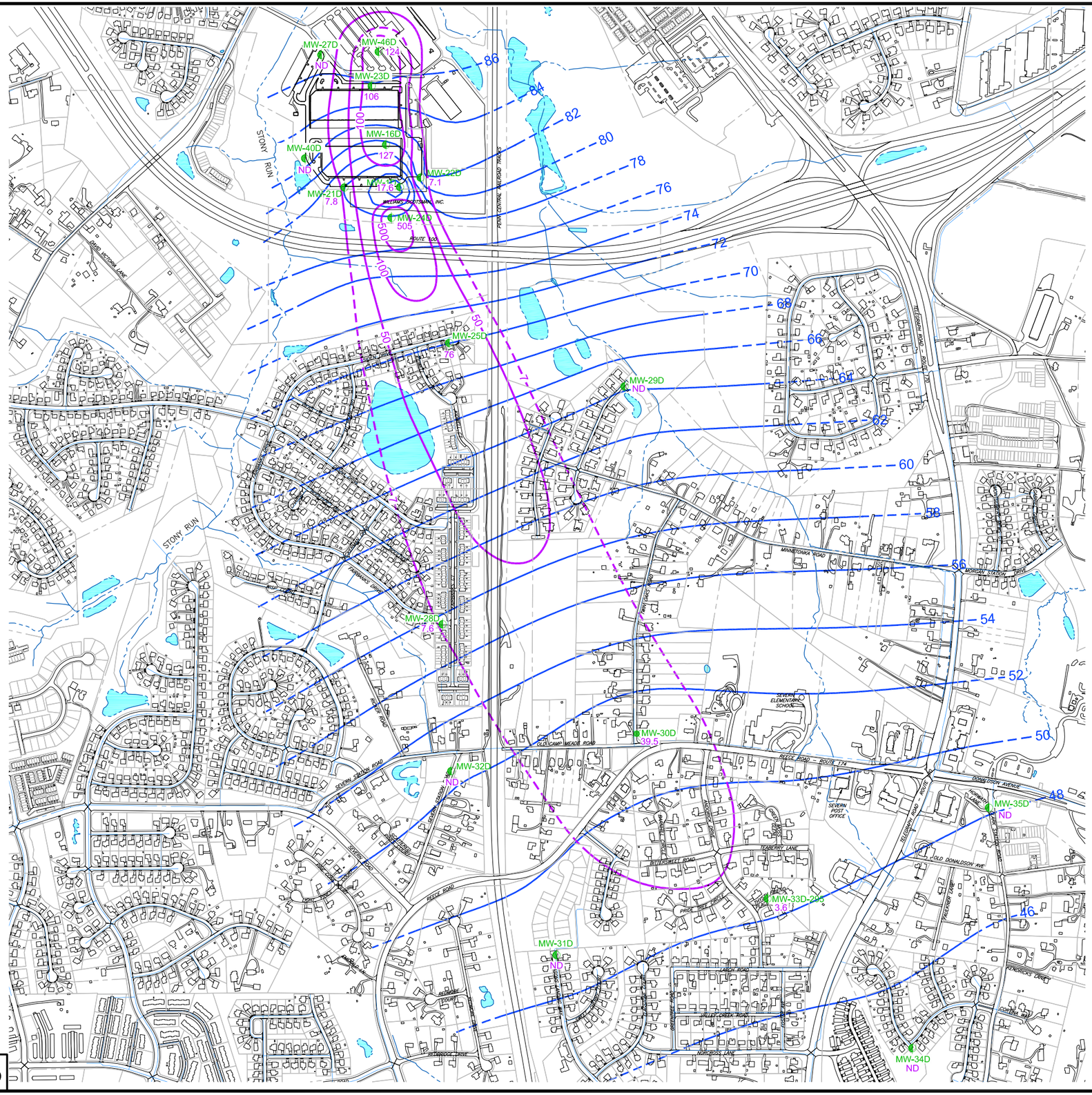
FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

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

FIGURE 7

Drawing Number
314V1545.011-067



NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

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

- PROPERTY LINE
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- ND — NOT DETECTED
- 76 — 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
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)

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: CC 2/16/2021
Approved: RG 2/16/2021
DWG Name: 314V1545.011-070

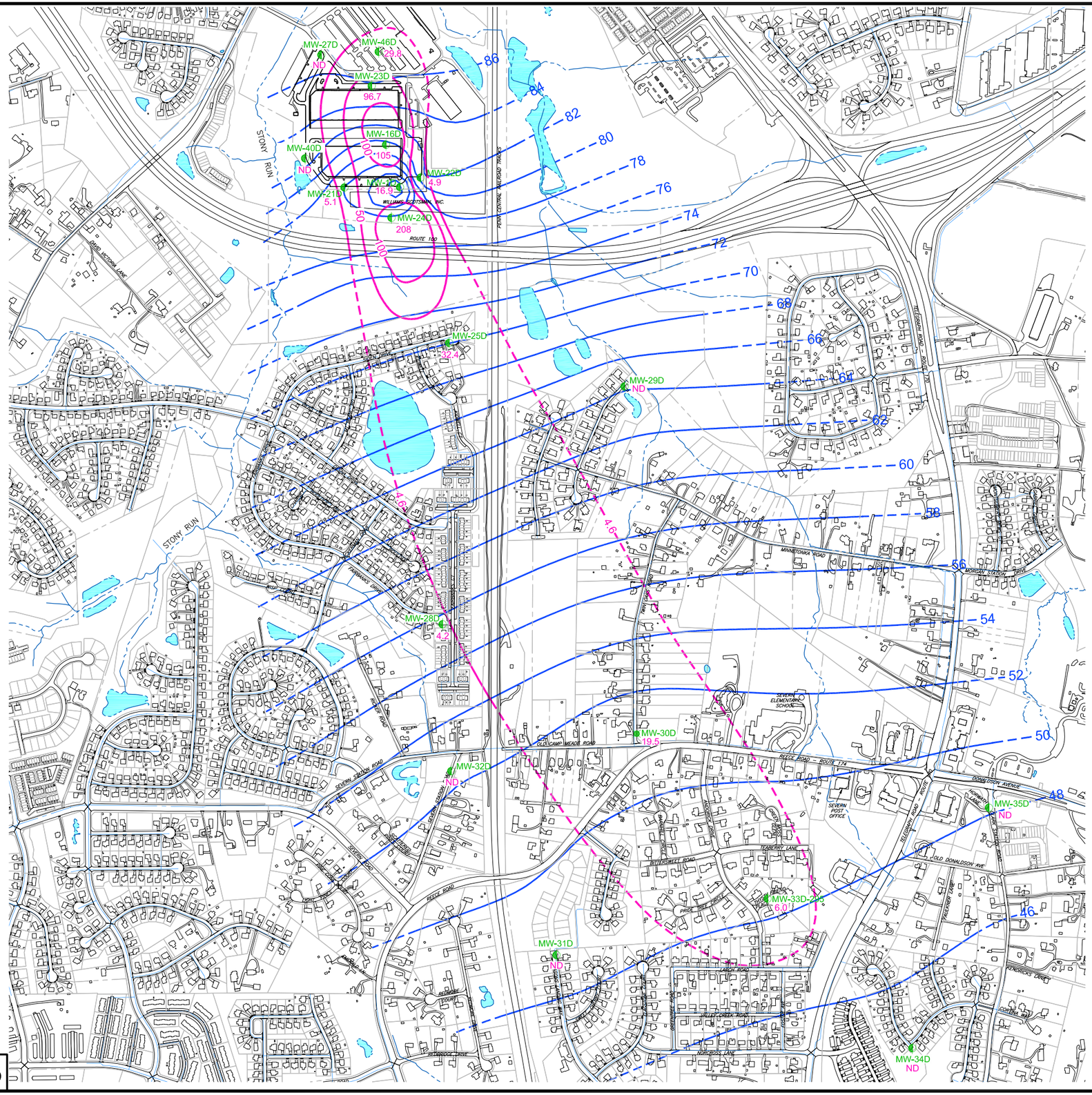
FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND
PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

Figure 8

INFERRED 1,1–DCE DISTRIBUTION IN DEEP CONFINED PORTION OF LOWER PATAPSCO AQUIFER (NOVEMBER 2020)

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

B



NOTICE: THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECTION OF A PROFESSIONAL. DO NOT ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE WRITTEN CONSENT OF WSP USA INC.

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

LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- CONFINED LOWER PATAPSCO AQUIFER MONITORING WELL
- CONFINED LOWER PATAPSCO AQUIFER AND PATUXENT AQUIFER MONITORING WELLS
- ND — NOT DETECTED
- 208 — 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
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)

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: CC 2/16/2021
Approved: RG 2/16/2021
DWG Name: 314V1545.011-071

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

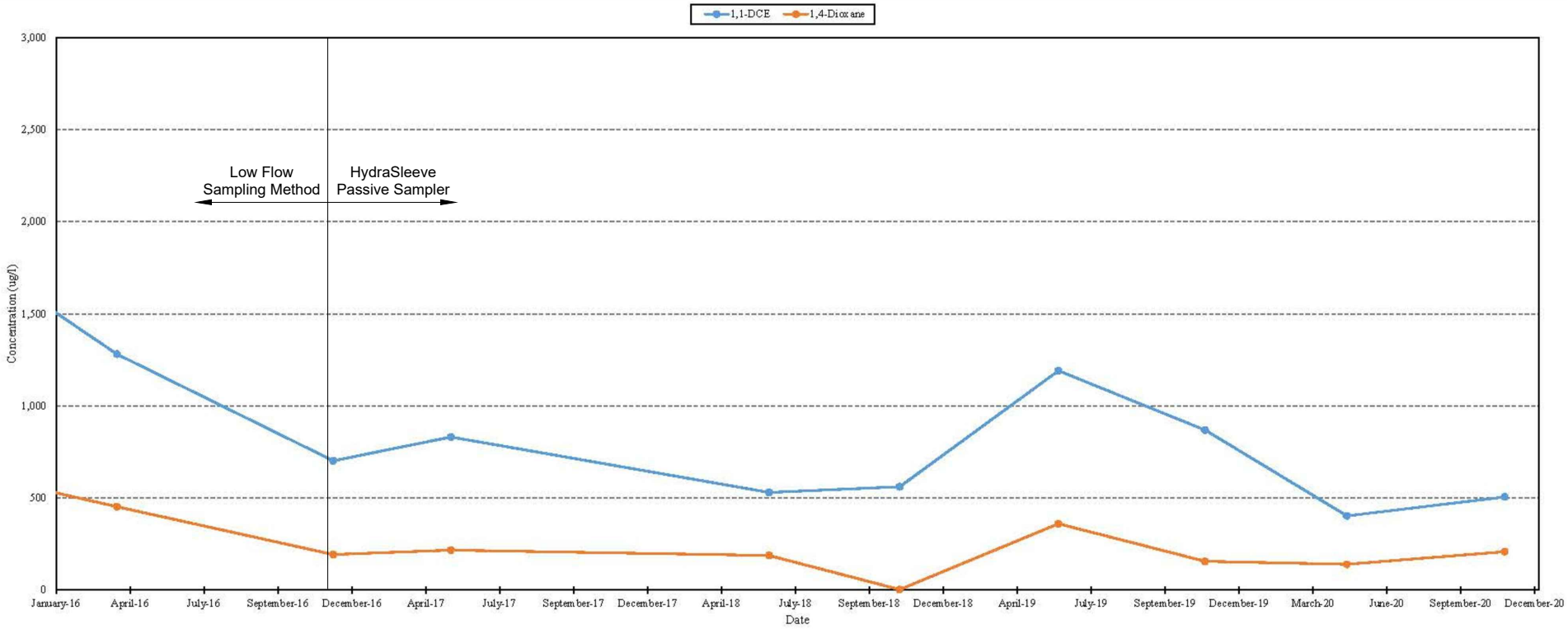
Figure 9

INFERRED 1,4–DIOXANE DISTRIBUTION IN DEEP CONFINED PORTION OF LOWER PATAPSCO AQUIFER (NOVEMBER 2020)

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

B

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:33 PM USEC01012



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

A

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

Figure 10

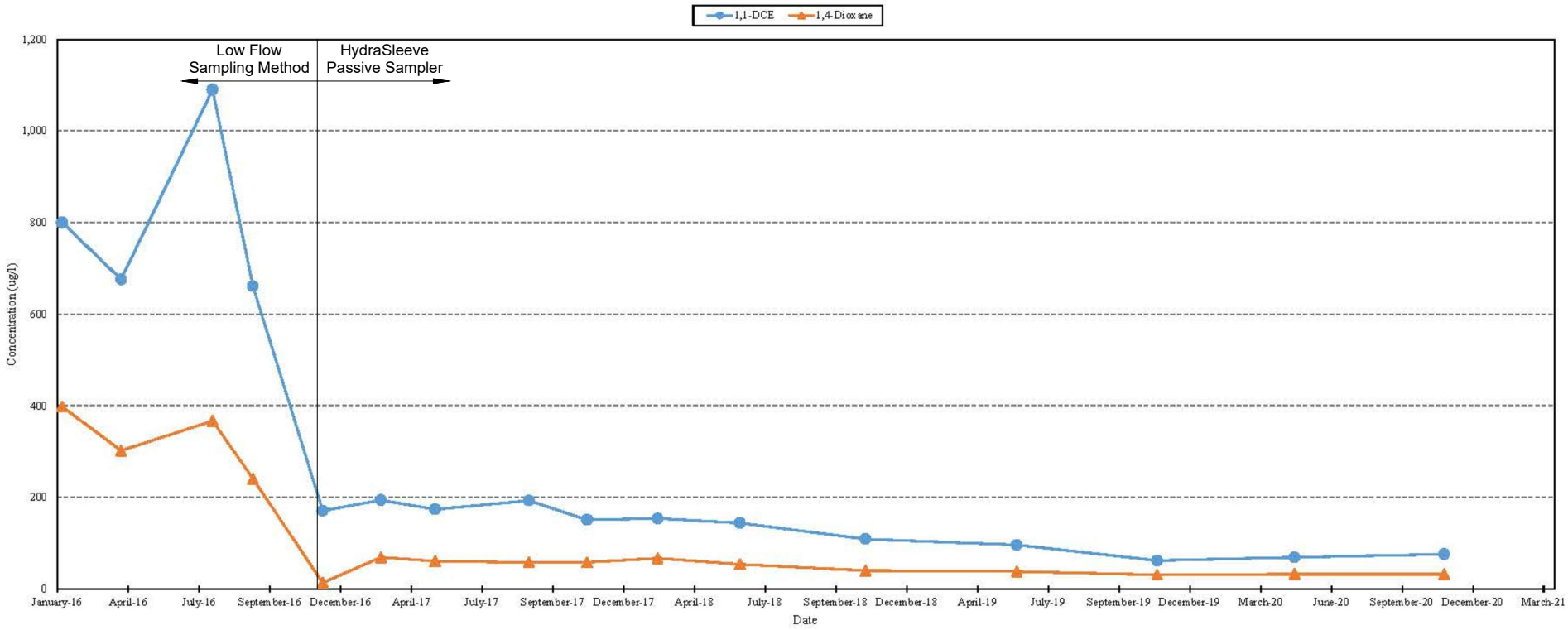
CONCENTRATION vs. TIME PLOT
MW-24D

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RM
DWG Name: 314V1545.011-069

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:33 PM USEC01012



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

A

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

Figure 11

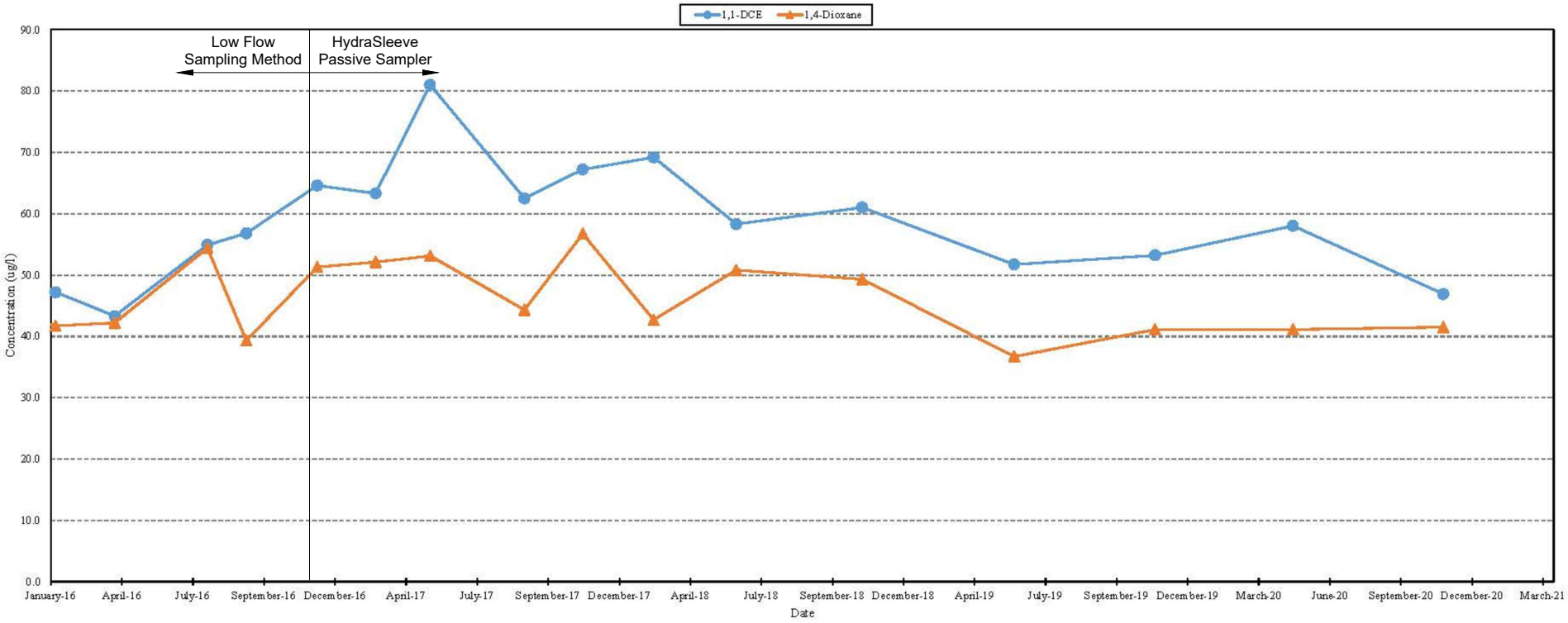
CONCENTRATION vs. TIME PLOT
MW-25D-130

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RKJ
DWG Name: 314V1545.011-069

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:33 PM USEC01012



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

A

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

Figure 12

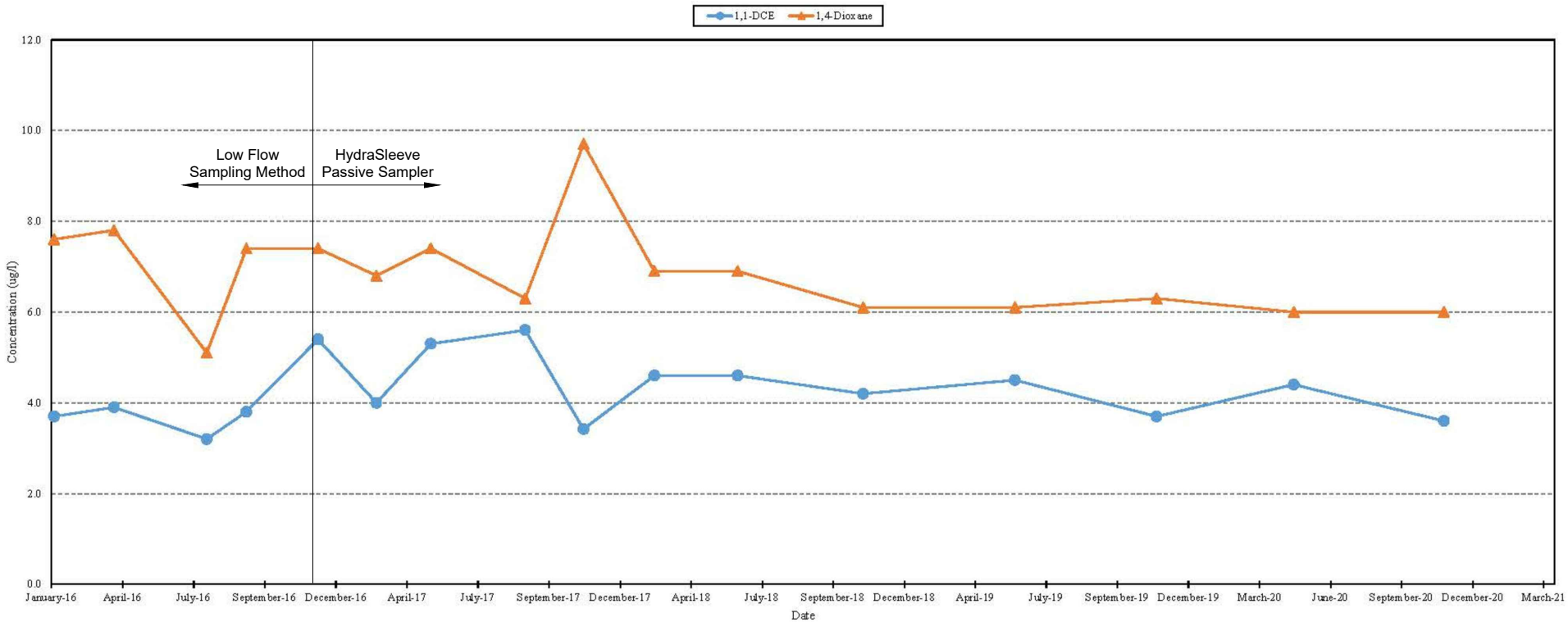
CONCENTRATION vs. TIME PLOT
MW-25D-192

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RM
DWG Name: 314V1545.011-069

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:34 PM USEC01012



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

A

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

Figure 13

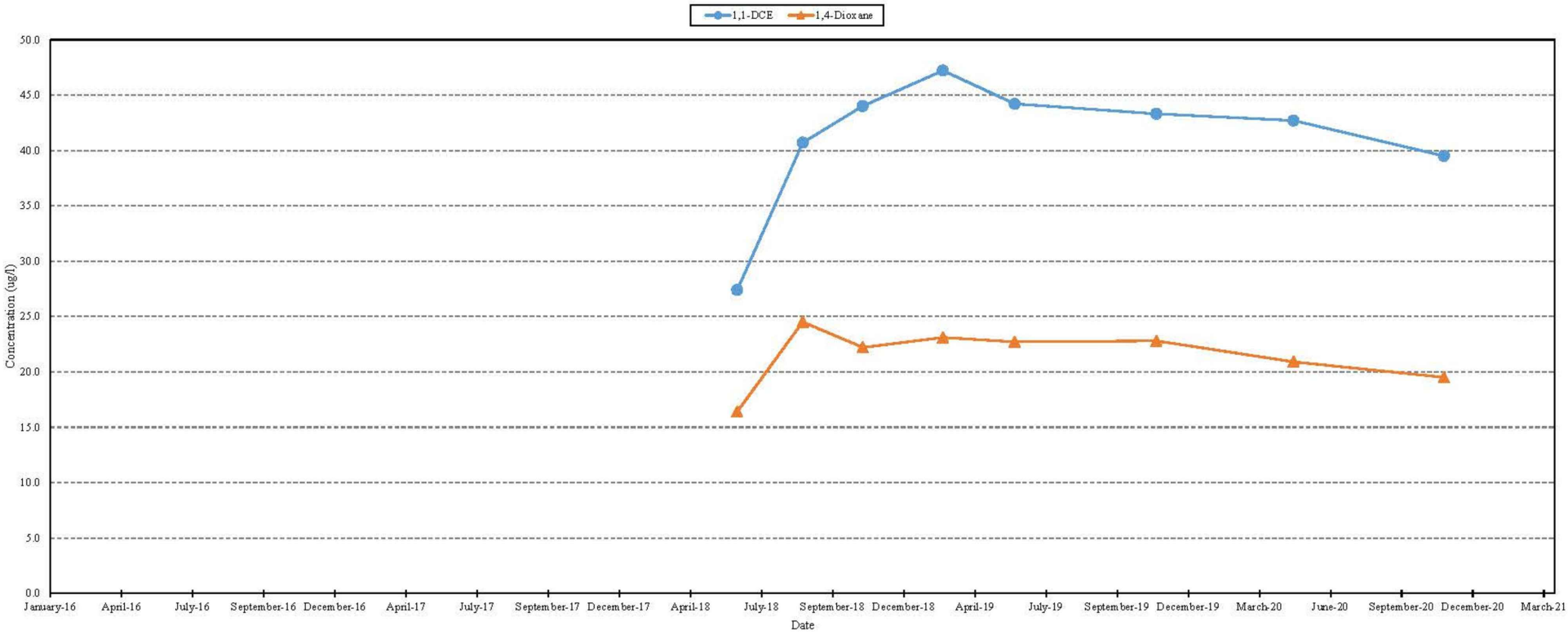
CONCENTRATION vs. TIME PLOT
MW-33D-295

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RKJ
DWG Name: 314V1545.011-069

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:34 PM USEC01012



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

A

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

Figure 14

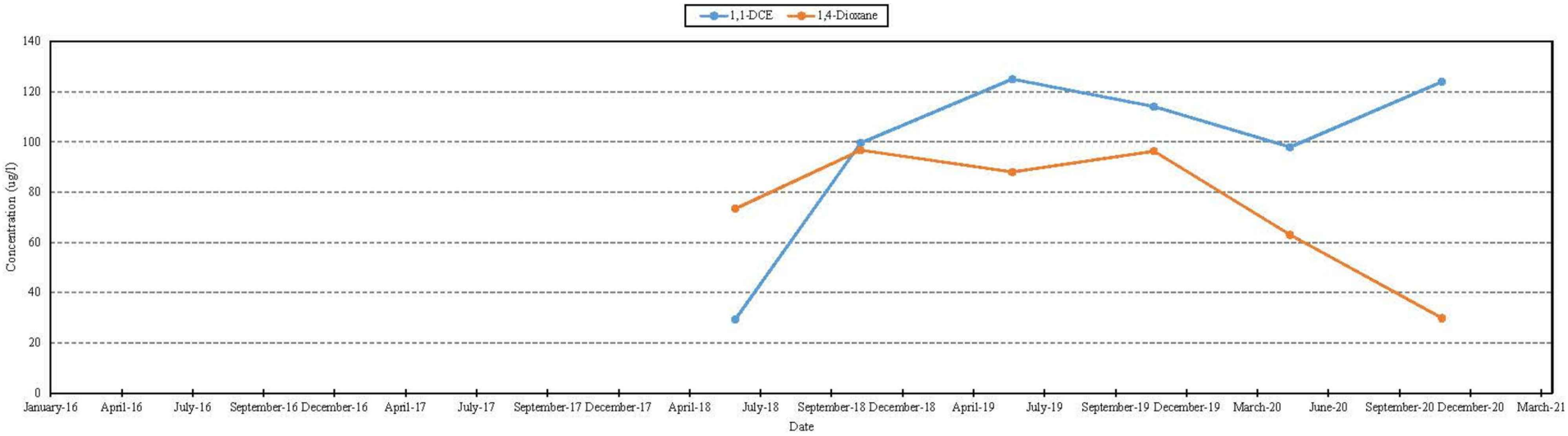
CONCENTRATION vs. TIME PLOT
MW-30D-273

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RM
DWG Name: 314V1545.011-069

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.011\CAD\314V1545.011-069.dwg 2/18/2021 9:34 PM USEC01012



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

A

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

Figure 15

CONCENTRATION vs. TIME PLOT
MW-46D

FORMER KOP-FLEX FACILITY
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

Drawn By: EGC
Checked: CC 2/18/2021
Approved: RKJ
DWG Name: 314V1545.011-069

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	116	10.0	106.0 - 116.0	18.77 - 8.77
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 Elevation Data - Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	3/17/2015		6/15/2015		9/21/2015		1/4/2016		3/21/2016		12/7/2016		5/1/2017	
			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*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Unconfined LPA	130.6	12.84	117.76	12.46	118.14	14.33	116.27	13.48	117.12	12.75	117.85	14.61	115.99	14.02	116.58
MW-28S *	Unconfined LPA	150.5	25.56	124.94	25.24	125.26	25.88	124.62	25.35	125.15	25.34	125.16	26.8	123.70	27.4	123.10
MW-45	Unconfined LPA	126.7	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	13.67	113.05
MW-24D	Confined LPA	129.1	50.9	78.20	49.29	79.81	NM	-	NM	-	44.38	84.72	46.3	82.80	48.35	80.75
MW-25-130	Confined LPA	130.5	58.7	71.80	57.59	72.91	58.26	72.24	53.95	76.55	51.01	79.49	50.27	80.23	53.80	76.70
MW-25-192	Confined LPA	130.5	59.99	70.51	56.4	74.10	57.23	73.27	53.05	77.45	50.27	80.23	52.4	78.10	53.11	77.39
MW-28D	Confined LPA	150.5	93.06	57.44	89.36	61.14	90.34	60.16	84.62	65.88	80.72	69.78	83.35	67.15	82.72	67.78
MW-29D	Confined LPA	131.9	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-273	Confined LPA	153.5	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-31D	Confined LPA	162.5	114.02	48.48	108.58	53.92	109.51	52.99	102.44	60.06	98.41	64.09	114.20	48.30	100.24	62.26
MW-32D	Confined LPA	156.1	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-33D-235	Confined LPA	178.6	131.83	46.77	125.66	52.94	127.11	51.49	119.14	59.46	115.25	63.35	114.2	64.40	117.26	61.34
MW-33D-295	Confined LPA	178.3	131.52	46.78	125.42	52.88	126.91	51.39	118.90	59.40	114.96	63.34	131.50	46.80	117.03	61.27
MW-34D	Confined LPA	183.9	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-35D	Confined LPA	177.8	132.01	45.79	126.28	51.52	127.89	49.91	118.96	58.84	114.34	63.46	131.91	45.89	117.28	60.52
MW-46D	Confined LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-

Notes:
LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019

Table 2

Historical Groundwater Elevation Data - Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	8/31/2017		11/14/2017		2/13/2018		5/31/2018		8/23/2018		11/8/2018	
			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 *	Unconfined LPA	130.6	14.09	116.51	14.6	116.00	14.56	116.04	13.10	117.50	NM	-	11.84	118.76
MW-28S *	Unconfined LPA	150.5	27.2	123.30	27.22	123.28	27.48	123.02	27.42	123.08	NM	-	24.33	126.17
MW-45	Unconfined LPA	126.7	NM	-	NM	-	NM	-	12.98	113.74	NM	-	NM	-
MW-24D	Confined LPA	129.1	48.35	80.75	51.99	77.11	NM		50.94	78.16	NM	-	NM	-
MW-25-130	Confined LPA	130.5	61.38	69.12	58.46	72.04	58.31	72.19	58.23	72.27	59.53	70.97	58.75	71.75
MW-25-192	Confined LPA	130.5	60.36	70.14	58.71	71.79	57.49	73.01	57.40	73.10	58.69	71.81	57.63	72.87
MW-28D	Confined LPA	150.5	94.55	55.95	89.03	61.47	67.37	83.13	88.75	61.75	90.98	59.52	88.30	62.20
MW-29D	Confined LPA	131.9	NM	-	NM	-	NM	-	64.94	66.98	66.56	65.36	65.03	66.89
MW-30D-273	Confined LPA	153.5	NM	-	NM	-	NM	-	98.66	54.88	100.70	52.84	98.14	55.40
MW-31D	Confined LPA	162.5	115.67	46.83	107.21	55.29	106.29	56.21	106.80	55.70	109.95	52.55	106.27	56.23
MW-32D	Confined LPA	156.1	NM	-	NM	-	NM	-	97.90	58.24	100.65	55.49	98.97	57.17
MW-33D-235	Confined LPA	178.6	133.39	45.21	124.55	54.05	123.79	54.81	124.00	54.60	127.52	51.08	125.14	53.46
MW-33D-295	Confined LPA	178.3	133.14	45.16	124.36	53.94	123.60	54.70	123.83	54.47	127.34	50.96	125.69	52.61
MW-34D	Confined LPA	183.9	NM	-	NM	-	NM	-	132.70	51.21	136.42	47.49	131.76	52.15
MW-35D	Confined LPA	177.8	133.55	44.25	125.59	52.21	124.02	53.78	124.27	53.53	128.19	49.61	123.64	54.16
MW-46D	Confined LPA	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-30D-413	Patuxent	153.1	NM	-	NM	-	NM	-	138.10	15.03	143.75	9.38	140.62	12.51
MW-36D	Patuxent	158.7	NM	-	NM	-	NM	-	141.75	16.96	146.32	12.39	143.85	14.86

Notes:
LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019

Table 2

Historical Groundwater Elevation Data - Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Aquifer/Zone	TOC Elevation	2/19/2019		5/22/2019		8/6/2019		11/20/2019		2/12/2020		5/14/2020		11/23/2020	
			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*	*Depth to Water*	*Groundwater Elevation*
MW-25S *	Unconfined LPA	130.6	11.75	118.85	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-28S *	Unconfined LPA	150.5	23.30	127.20	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
MW-45	Unconfined LPA	126.7	11.98	114.74	11.75	114.97	NM	-	14.55	112.17	NM	-	NM	-	13.61	113.11
MW-24D	Confined LPA	129.1	48.92	80.18	49.67	79.43	52.37	76.73	51.12	77.98	50.10	79.00	48.80	80.30	53.02	76.08
MW-25-130	Confined LPA	130.5	54.96	75.54	56.23	74.27	60.79	69.71	59.94	70.56	55.55	74.95	54.95	75.55	60.50	70.00
MW-25-192	Confined LPA	130.5	54.20	76.30	55.45	75.05	60.37	70.13	59.02	71.48	54.70	75.80	54.23	76.27	59.50	71.00
MW-28D	Confined LPA	150.5	84.78	65.72	86.96	63.54	94.24	56.26	91.37	59.13	85.00	65.50	84.36	66.14	92.87	57.63
MW-29D	Confined LPA	131.9	60.64	71.28	62.36	69.56	67.20	64.72	67.10	64.82	61.28	70.64	60.61	71.31	67.75	64.17
MW-30D-273	Confined LPA	153.5	93.10	60.44	95.74	57.80	104.75	48.79	101.12	52.42	93.29	60.25	92.60	60.94	103.09	50.45
MW-31D	Confined LPA	162.5	102.47	60.03	104.91	57.59	113.35	49.15	110.14	52.36	102.73	59.77	NM	-	113.30	49.20
MW-32D	Confined LPA	156.1	93.79	62.35	97.02	59.12	99.43	56.71	101.56	54.58	92.35	63.79	94.31	61.83	103.76	52.38
MW-33D-235	Confined LPA	178.6	119.35	59.25	121.72	56.88	132.76	45.84	127.87	50.73	119.72	58.88	119.10	59.50	NM	-
MW-33D-295	Confined LPA	178.3	119.10	59.20	NM	NA	131.14	47.16	127.65	50.65	119.54	58.76	118.84	59.46	130.21	48.09
MW-34D	Confined LPA	183.9	127.40	56.51	129.93	53.98	141.48	42.43	136.62	47.29	127.75	56.16	127.01	56.90	139.08	44.83
MW-35D	Confined LPA	177.8	119.18	58.62	121.65	56.15	127.51	50.29	129.89	47.91	119.68	58.12	119.06	58.74	129.67	48.13
MW-46D	Confined LPA	124.8	NM	-	35.47	89.30	38.40	86.37	37.90	86.87	36.13	88.64	35.73	89.04	37.72	87.05
MW-30D-413	Patuxent	153.1	130.73	22.40	137.25	15.88	145.27	7.86	143.64	9.49	128.12	25.01	127.25	25.88	142.22	10.91
MW-36D	Patuxent	158.7	134.83	23.88	141.30	17.41	147.65	11.06	146.75	11.96	132.11	26.60	131.08	27.63	145.25	13.46

Notes:
LPA = Lower Patapsco Aquifer
NM = Not Measured
TOC = Top of Casing
* Well abandoned in August 2019

Table 3

Hydrasleeve Depth Intervals
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland

Well ID	Well Construction		Hydrasleeve Placement	
	Well Diameter	Screened Interval (ft-bgs)	HS Size	HS Interval Placement (ft-bgs)
Shallow (Unconfined) Lower Patapsco Aquifer				
MW-25(Abandoned August 2019)	2	30 - 40	600 mL	34 - 36.5
MW-28(Abandoned August 2019)	2	35 - 45	600 mL	39 - 41.5
MW-45	2	28 - 38	600 mL	32 - 34.5
Deep (Confined) Lower Patapsco Aquifer				
MW-24D	2	118 - 128	600 mL	122 - 124.5
MW-25D-130	2	120 - 130	600 mL	125 - 127.5
MW-25D-192	2	182 - 192	600 mL	185 - 187.5
MW-28D	2	200 - 210	600 mL	205 - 207.5
MW-29D	2	141 - 151	600 mL	146 - 148.5
MW-30D-273	2	263 - 273	600 mL	267 - 269.5
MW-31D	2	270 - 280	600 mL	275 - 277.5
MW-32D	2	226 - 236	600 mL	233 - 235.5
MW-33D-236	2	226 - 236	600 mL	230 - 232.5
MW-33D-295	2	285 - 295	600 mL	290 - 292.5
MW-34D	2	375 - 385	600 mL	379 - 381.5
MW-35D	2	288 - 298	600 mL	293 - 295.5
MW-46D	2	80 - 90	600 mL	84 - 86.5
Patuxent Aquifer				
MW-30D-413	2	403 - 413	600 mL	407 - 409.5
MW-36D	2	350 - 360	600 mL	357 - 359.5

ft-bgs = feet below ground surface
HS = hydrasleeve
mL = milliliters

Table 4

2020 Field Parameter Measurements
Offsite Monitoring Wells
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Well ID	Sample Date	Temperature (ºC)	pH (SU)	Specific Conductivity (mS/cm)	Turbidity (NTU)
Unconfined Lower Patapsco Aquifer Wells					
MW-45	12/8/2020	NR	NR	NR	NR
Confined Lower Patapsco Aquifer Wells					
MW-24D	5/12/2020	16.72	4.06	0.042	449
	11/23/2020	14.06	4.08	0.093	55.1
MW-25D-130	5/14/2020	21.22	4.77	0.026	131
	11/23/2020	NM	NM	NM	NM
MW-25D-192	5/14/2020	17.62	5.45	0.063	34.4
	11/23/2020	11.84	5.38	0.053	15.7
MW-28D	5/14/2020	20.96	5.55	0.044	25.8
	11/23/2020	16.63	4.45	NM	137
MW-29D	5/14/2020	NM	NM	NM	NM
	11/23/2020	15.81	4.41	0.067	18.9
MW-30D-273	5/14/2020	NM	NM	NM	NM
	11/23/2020	12.90	4.58	0.018	132
MW-31D	6/2/2020	NR	NR	NR	NR
	11/23/2020	14.09	3.97	0.022	66
MW-32D	5/14/2020	20.39	5.35	0.163	176
	11/23/2020	16.75	4.24	0.19	89.80
MW-33D-235	5/14/2020	21.08	4.73	0.013	42.3
	11/23/2020	13.00	3.95	0.016	19.6
MW-33D-295	5/14/2020	20.83	4.70	0.009	32.4
	11/23/2020	12.72	3.98	0.018	132
MW-34D	5/14/2020	21.07	4.38	0.089	198
	11/23/2020	NM	NM	NM	NM
MW-35D	5/14/2020	21.32	4.39	0.040	43.8
	11/23/2020	12.90	4.94	0.067	18.9
MW-46D	5/12/2020	15.93	4.19	0.178	282
	11/22/2020	12.92	3.95	0.173	197
Patuxent Aquifer Wells					
MW-36D	5/14/2020	NM	NM	NM	NM
	11/23/2020	NM	NM	NM	NM
MW-30D-413	5/14/2020	22.17	4.62	0.012	>1,000
	11/23/2020	13.07	4.60	0.029	987

a/ ºC = degrees Celsius; SU = standard units; mS/cm = milli siemens per centimeter;
NTU = Nephelometric Turbidity Unit; NR = not recorded;
NM = Not measured due to insufficient water in HydraSleeve to collect readings.

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Well ID	Sample Date	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	1,4-Dioxane	Methylene Chloride	1,1,1-TCA	1,1,2-TCA	TCE
Groundwater Quality Standard (µg/L)		2.8 (c/)	5	7	70	4.6	5	200	5	5
Unconfined Lower Patapsco Aquifer Wells										
MW-25 (b)	3/19/2015	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/23/2016	1.0 U	1.0 U	1.5	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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 (b)	3/17/2015	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	3/22/2016	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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
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
	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
	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
	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
Confined Lower Patapsco Aquifer Wells										
MW-24D	6/1/2012	ND	ND	**1,300**	5.0 U	**342**	10.0 U	53	5.0 U	5.0 U
	8/27/2012	72	**13**	**1,600**	6	2.0 U	10.0 U	60	1.5	**13**
	12/14/2012	61	**12**	**1,500**	6.7	**393**	10.0 U	62	1.5	**16**
	7/18/2013	57.7	**10.8**	**1,520**	6.2	**470**	10.0 U	48.7	1.3	**12.4**
	12/13/2013	47.4	ND	**1,190**	5.0 U	**433**	10.0 U	34.1	5.0 U	**10.1**
	6/14/2014	57.3	**11.3**	**1,510**	5.0 U	**488**	10.0 U	43.4	5.0 U	**14.2**
	12/5/2014	**106**	ND	**2,640**	5.0 U	**657**	10.0 U	60.9	5.0 U	5.0 U
	6/15/2015	**92.5**	ND	**2,100**	5.0 U	**728**	10.0 U	53.3	5.0 U	5.0 U
	3/16/2016	68.2	ND	**1,280**	5.0 U	**452**	10.0 U	54.3	5.0 U	5.0 U
	12/8/2016	36.1	**5.2**	**701**	5.0 U	**192**	10.0 U	9.0	5.0 U	5.0 U
	5/2/2017	40.4	**5.6**	**830**	5.0 U	**216**	10.0 U	10.2	5.0 U	5.0 U
	5/30/2018	26.6	4.0 U	**529**	4.0 U	**187**	8.0 U	5.5	4.0 U	4.0 U
	11/7/2018	**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	**66.2**	10.0 U	**1,190**	10.0 U	**359**	50.0 U	18	10.0 U	10.0 U
	11/19/2019	**54.5**	**6.6**	**868**	5.0 U	**155**	25.0 U	10	5.0 U	6.0 U
	5/12/2020	**25**	3.3	**402**	5.0 U	**139**	25.0 U	3.7	5.0 U	3.2
	11/23/2020	**73.5**	4.0 U	**505**	4.0 U	**208**	20.0 U	4.4	4.0 U	4.0 U
MW-25D-130	3/19/2015	38.6	**10.8**	**854**	10.0 U	**446**	200 U	**8,930**	100 U	100 U
	6/24/2015	37.1	**8.9**	**1,030**	4.6	**303**	2.0 U	46.3	1.2	**6.8**
	9/23/2015	29.7	10.0 U	**697**	10.0 U	**295**	20.0 U	32.3	10.0 U	**14.2**
	1/7/2016	33.4	**9.7**	**800**	5.0 U	**398**	10.0 U	5.0 U	5.0 U	**6.1**
	3/23/2016	24.5	**8.0**	**676**	5.0 U	**302**	10.0 U	26.2	5.0 U	**5.0**
	7/19/2016	39.3	**10.2**	**1,090**	4.9 J	**367**	14.3 J	37.0	10.0 U	**6.5 J**
	9/9/2016	27.9	**6.4**	**661**	5.0 U	**241**	**12.0**	25.0	5.0 U	5.0 U
	12/8/2016	6.7	1.5	**171**	1.0 U	**13.6**	2.0 U	6.9	1.0 U	1.0 U
	2/21/2017	7.2	1.7	**194**	1.0 U	**69.1**	2.0 U	7.0	1.0 U	1.2
	5/2/2017	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	7.4	1.7	**193**	2.0 U	**57.9**	4.0 U	6.9	2.0 U	2.0 U
	11/14/2017	5.1	1.3	**151**	0.57 J	**58.5**	5.0 U	6.4	1.0 U	1.1
	2/13/2018	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	5.0	1.4	**144**	2.0 U	**53.9**	5.0 U	5.3	1.0 U	1.0 U
	11/8/2018	**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	**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	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	**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	**3.3**	1.0 U	**76.0**	1.0 U	**32.4**	5.0 U	4.9	1.0 U	1.0 U
MW-25D-192	3/19/2015	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	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	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	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	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	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	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	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	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	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	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	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	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	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	**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	**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	**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	**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	**11.3**	1.0 U	**46.9**	1.0 U	**41.5**	5.0 U	5.8	1.0 U	1.0 U

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Well ID	Sample Date	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	1,4-Dioxane	Methylene Chloride	1,1,1-TCA	1,1,2-TCA	TCE
Groundwater Quality Standard (µg/L)		2.8 (c/)	5	7	70	4.6	5	200	5	5
Confined Lower Patapsco Aquifer Wells										
MW-28D	3/17/2015	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	**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	**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	**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	**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	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	**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	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	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	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	5.0	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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	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	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	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	**7.6**	1.0 U	4.2	5.0 U	1.0 U	1.0 U	1.0 U
MW-29D	5/21/2018	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-30D-273	5/31/2018	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	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	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	1.1	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	1.1	1.0 U	**44.2**	1.0 U	**22.7**	5.0 U	2.0	1.0 U	1.0 U
	11/20/2019	1.1	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	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	1.0 U	**39.5**	1.0 U	**19.5**	5.0 U	1.0 U	1.0 U	1.0 U
MW-31D	3/17/2015	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	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	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	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	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-32D	5/31/2018	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-33D-235	3/18/2015	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	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	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	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	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Table 5

Historical Offsite Groundwater Sampling Results (2015 to Present)
Former Kop-Flex Facility Site
Hanover, Maryland (a)

Well ID	Sample Date	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	1,4-Dioxane	Methylene Chloride	1,1,1-TCA	1,1,2-TCA	TCE
Groundwater Quality Standard (µg/L)		2.8 (c/)	5	7	70	4.6	5	200	5	5
MW-33D-295	3/18/2015	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	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	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	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	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	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	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	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	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	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	5.6	1.0 U	**6.3**	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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	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	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	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	3.6	1.0 U	**6.0**	5.0 U	1.0 U	1.0 U	1.0 U
MW-34D	5/31/2018	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	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	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	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	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	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	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	2.0 U	5.0 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	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	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	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	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	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	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	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	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	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	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	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	11/14/2017	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	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	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	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 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 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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-46D	5/30/2018	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	**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	**26.1**	1.0	**125**	1.0 U	**88.0**	5.0 U	10.2	1.0 U	1.0 U
	11/19/2019	**23.4**	1.4	**114**	1.0	**96.3**	5.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	**20.7**	1.4	**98**	1.0	**63.0**	5.0 U	1.0 U	1.0 U	1.0 U
	11/23/2020	**18.4**	1.0 U	**124**	1.0 U	**29.8**	5.0 U	6.4	1.0 U	1.0 U
Patuxent Aquifer Wells										
MW-36D	5/30/2018	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U
MW-30D-413	5/31/2018	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	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	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	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	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	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	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	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U

a/ All sample concentrations are in micrograms per liter (µg/l).
b/ Well abandoned August 2019
c/ MDE GW Quality Standard changed from 90 µg/l to 2.8 µg/l in October 2018
DCA = dichloroethane; DCE = dichloroethene; TCA = trichloroethane; TCE = trichlorothene
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

APPENDIX

A 2020 LABORATORY ANALYTICAL REPORTS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

May 27, 2020

Eric Johnson
WSP USA
13530 Dulles Technology Drive
Suite 300
Herndon, VA 20171

RE: Project: Kop-Flex offsite
Pace Project No.: 92478024

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on May 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Molly Long, WSP
Pam Robertson, WSP USA

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Kop-Flex offsite
Pace Project No.: 92478024

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92478024001	**MW-24D**	Water	05/12/20 15:55	05/18/20 09:12
92478024002	**MW-46D**	Water	05/12/20 17:45	05/18/20 09:12
92478024003	**MW-29D**	Water	05/14/20 13:30	05/18/20 09:12
92478024004	**MW-30D-273**	Water	05/14/20 13:45	05/18/20 09:12
92478024005	**MW-30D-413**	Water	05/14/20 13:55	05/18/20 09:12
92478024006	**MW-32D**	Water	05/14/20 14:20	05/18/20 09:12
92478024007	**MW-33D-295**	Water	05/14/20 15:05	05/18/20 09:12
92478024008	**MW-33D-235**	Water	05/14/20 15:15	05/18/20 09:12
92478024009	**MW-35D**	Water	05/14/20 15:55	05/18/20 09:12
92478024010	**MW-34D**	Water	05/14/20 16:05	05/18/20 09:12
92478024011	**MW-28D**	Water	05/14/20 16:30	05/18/20 09:12
92478024012	**MW-36D**	Water	05/14/20 16:45	05/18/20 09:12
92478024013	**Dup051420**	Water	05/14/20 09:00	05/18/20 09:12
92478024014	**MW-25D-130**	Water	05/14/20 17:05	05/18/20 09:12
92478024015	**MW-25D-190**	Water	05/14/20 17:10	05/18/20 09:12

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Kop-Flex offsite
Pace Project No.: 92478024

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92478024001	**MW-24D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024002	**MW-46D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024003	**MW-29D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024004	**MW-30D-273**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024005	**MW-30D-413**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024006	**MW-32D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024007	**MW-33D-295**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024008	**MW-33D-235**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024009	**MW-35D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024010	**MW-34D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024011	**MW-28D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024012	**MW-36D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024013	**Dup051420**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024014	**MW-25D-130**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92478024015	**MW-25D-190**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C

PASI-C = Pace Analytical Services - Charlotte

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-24D **Lab ID: 92478024001** Collected: 05/12/20 15:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	62.5	2.5		05/26/20 18:09	67-64-1	
Benzene	ND	ug/L	2.5	2.5		05/26/20 18:09	71-43-2	
Bromobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	108-86-1	
Bromochloromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	74-97-5	
Bromodichloromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	75-27-4	
Bromoform	ND	ug/L	2.5	2.5		05/26/20 18:09	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5		05/26/20 18:09	74-83-9	IH
2-Butanone (MEK)	ND	ug/L	12.5	2.5		05/26/20 18:09	78-93-3	
Carbon tetrachloride	ND	ug/L	2.5	2.5		05/26/20 18:09	56-23-5	
Chlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	108-90-7	
Chloroethane	ND	ug/L	2.5	2.5		05/26/20 18:09	75-00-3	
Chloroform	ND	ug/L	12.5	2.5		05/26/20 18:09	67-66-3	
Chloromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	74-87-3	
2-Chlorotoluene	ND	ug/L	2.5	2.5		05/26/20 18:09	95-49-8	
4-Chlorotoluene	ND	ug/L	2.5	2.5		05/26/20 18:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	12.5	2.5		05/26/20 18:09	96-12-8	
Dibromochloromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.5	2.5		05/26/20 18:09	106-93-4	
Dibromomethane	ND	ug/L	2.5	2.5		05/26/20 18:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	75-71-8	
1,1-Dichloroethane	**25.0**	ug/L	2.5	2.5		05/26/20 18:09	75-34-3	
1,2-Dichloroethane	**3.3**	ug/L	2.5	2.5		05/26/20 18:09	107-06-2	
1,1-Dichloroethene	**402**	ug/L	2.5	2.5		05/26/20 18:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.5	2.5		05/26/20 18:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.5	2.5		05/26/20 18:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.5	2.5		05/26/20 18:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.5	2.5		05/26/20 18:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.5	2.5		05/26/20 18:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.5	2.5		05/26/20 18:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.5	2.5		05/26/20 18:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.5	2.5		05/26/20 18:09	10061-02-6	
Diisopropyl ether	ND	ug/L	2.5	2.5		05/26/20 18:09	108-20-3	
Ethylbenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.5	2.5		05/26/20 18:09	87-68-3	IH
2-Hexanone	ND	ug/L	12.5	2.5		05/26/20 18:09	591-78-6	v1
p-Isopropyltoluene	ND	ug/L	2.5	2.5		05/26/20 18:09	99-87-6	
Methylene Chloride	ND	ug/L	12.5	2.5		05/26/20 18:09	75-09-2	v1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	12.5	2.5		05/26/20 18:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.5	2.5		05/26/20 18:09	1634-04-4	
Naphthalene	ND	ug/L	2.5	2.5		05/26/20 18:09	91-20-3	
Styrene	ND	ug/L	2.5	2.5		05/26/20 18:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.5	2.5		05/26/20 18:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.5	2.5		05/26/20 18:09	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-24D **Lab ID: 92478024001** Collected: 05/12/20 15:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	2.5	2.5		05/26/20 18:09	127-18-4	
Toluene	ND	ug/L	2.5	2.5		05/26/20 18:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.5	2.5		05/26/20 18:09	120-82-1	
1,1,1-Trichloroethane	**3.7**	ug/L	2.5	2.5		05/26/20 18:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.5	2.5		05/26/20 18:09	79-00-5	
Trichloroethene	**3.2**	ug/L	2.5	2.5		05/26/20 18:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.5	2.5		05/26/20 18:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	2.5		05/26/20 18:09	96-18-4	
Vinyl acetate	ND	ug/L	5.0	2.5		05/26/20 18:09	108-05-4	v1
Vinyl chloride	ND	ug/L	2.5	2.5		05/26/20 18:09	75-01-4	
Xylene (Total)	ND	ug/L	2.5	2.5		05/26/20 18:09	1330-20-7	
m&p-Xylene	ND	ug/L	5.0	2.5		05/26/20 18:09	179601-23-1	
o-Xylene	ND	ug/L	2.5	2.5		05/26/20 18:09	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	2.5		05/26/20 18:09	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	70-130	2.5		05/26/20 18:09	17060-07-0	
Toluene-d8 (S)	102	%	70-130	2.5		05/26/20 18:09	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**139**	ug/L	5.0	2.5		05/20/20 18:52	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	115	%	50-150	2.5		05/20/20 18:52	17060-07-0	
Toluene-d8 (S)	96	%	50-150	2.5		05/20/20 18:52	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-46D **Lab ID: 92478024002** Collected: 05/12/20 17:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 07:40	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 07:40	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 07:40	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 07:40	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 07:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 07:40	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 07:40	74-83-9	v3
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 07:40	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 07:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 07:40	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 07:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 07:40	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:40	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 07:40	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 07:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 07:40	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 07:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 07:40	75-71-8	
1,1-Dichloroethane	**20.7**	ug/L	1.0	1		05/23/20 07:40	75-34-3	M1,R1
1,2-Dichloroethane	**1.4**	ug/L	1.0	1		05/23/20 07:40	107-06-2	
1,1-Dichloroethene	**97.9**	ug/L	1.0	1		05/23/20 07:40	75-35-4	M1,R1
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:40	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 07:40	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 07:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 07:40	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 07:40	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 07:40	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 07:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 07:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 07:40	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 07:40	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 07:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:40	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-46D **Lab ID: 92478024002** Collected: 05/12/20 17:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 07:40	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 07:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:40	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 07:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 07:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 07:40	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 07:40	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 07:40	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 07:40	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 07:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 07:40	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	70-130	1		05/23/20 07:40	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/23/20 07:40	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 07:40	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**63.0**	ug/L	2.0	1		05/21/20 14:32	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	50-150	1		05/21/20 14:32	17060-07-0	
Toluene-d8 (S)	110	%	50-150	1		05/21/20 14:32	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-29D **Lab ID: 92478024003** Collected: 05/14/20 13:30 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/26/20 16:17	67-64-1	
Benzene	ND	ug/L	1.0	1		05/26/20 16:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/26/20 16:17	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/26/20 16:17	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/26/20 16:17	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/26/20 16:17	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/26/20 16:17	74-83-9	IH
2-Butanone (MEK)	ND	ug/L	5.0	1		05/26/20 16:17	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/26/20 16:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/26/20 16:17	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/26/20 16:17	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/26/20 16:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/26/20 16:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/26/20 16:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/26/20 16:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/26/20 16:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/26/20 16:17	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/26/20 16:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/26/20 16:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/26/20 16:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/26/20 16:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:17	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/26/20 16:17	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/26/20 16:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/26/20 16:17	87-68-3	IH
2-Hexanone	ND	ug/L	5.0	1		05/26/20 16:17	591-78-6	v1
p-Isopropyltoluene	ND	ug/L	1.0	1		05/26/20 16:17	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/26/20 16:17	75-09-2	v1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/26/20 16:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/26/20 16:17	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/26/20 16:17	91-20-3	
Styrene	ND	ug/L	1.0	1		05/26/20 16:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/26/20 16:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/26/20 16:17	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-29D **Lab ID: 92478024003** Collected: 05/14/20 13:30 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/26/20 16:17	127-18-4	
Toluene	ND	ug/L	1.0	1		05/26/20 16:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/26/20 16:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/26/20 16:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/26/20 16:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/26/20 16:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/26/20 16:17	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/26/20 16:17	108-05-4	v1
Vinyl chloride	ND	ug/L	1.0	1		05/26/20 16:17	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/26/20 16:17	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/26/20 16:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/26/20 16:17	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		05/26/20 16:17	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70-130	1		05/26/20 16:17	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/26/20 16:17	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 19:31	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	112	%	50-150	1		05/20/20 19:31	17060-07-0	
Toluene-d8 (S)	107	%	50-150	1		05/20/20 19:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-30D-273 **Lab ID: 92478024004** Collected: 05/14/20 13:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 07:22	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 07:22	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 07:22	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 07:22	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 07:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 07:22	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 07:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 07:22	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 07:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 07:22	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 07:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 07:22	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:22	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:22	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 07:22	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 07:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 07:22	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 07:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 07:22	75-71-8	
1,1-Dichloroethane	**1.0**	ug/L	1.0	1		05/23/20 07:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 07:22	107-06-2	
1,1-Dichloroethene	**42.7**	ug/L	1.0	1		05/23/20 07:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:22	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:22	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:22	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:22	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:22	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 07:22	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 07:22	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 07:22	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 07:22	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 07:22	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 07:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 07:22	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 07:22	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 07:22	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 07:22	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:22	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:22	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-30D-273 **Lab ID: 92478024004** Collected: 05/14/20 13:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 07:22	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 07:22	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:22	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 07:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 07:22	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 07:22	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 07:22	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 07:22	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 07:22	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 07:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 07:22	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 07:22	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		05/23/20 07:22	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 07:22	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**20.9**	ug/L	2.0	1		05/20/20 19:51	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	114	%	50-150	1		05/20/20 19:51	17060-07-0	
Toluene-d8 (S)	111	%	50-150	1		05/20/20 19:51	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-30D-413 **Lab ID: 92478024005** Collected: 05/14/20 13:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 07:04	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 07:04	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 07:04	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 07:04	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 07:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 07:04	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 07:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 07:04	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 07:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 07:04	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 07:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 07:04	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:04	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 07:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 07:04	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 07:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 07:04	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 07:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 07:04	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 07:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 07:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 07:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 07:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 07:04	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 07:04	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 07:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 07:04	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 07:04	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 07:04	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 07:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 07:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 07:04	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 07:04	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 07:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 07:04	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-30D-413 **Lab ID: 92478024005** Collected: 05/14/20 13:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 07:04	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 07:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 07:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 07:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 07:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 07:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 07:04	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 07:04	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 07:04	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 07:04	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 07:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 07:04	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 07:04	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/23/20 07:04	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		05/23/20 07:04	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 20:10	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	50-150	1		05/20/20 20:10	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		05/20/20 20:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-32D **Lab ID: 92478024006** Collected: 05/14/20 14:20 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 06:46	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 06:46	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 06:46	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 06:46	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 06:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 06:46	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 06:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 06:46	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 06:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 06:46	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 06:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 06:46	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:46	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 06:46	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 06:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 06:46	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 06:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 06:46	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:46	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:46	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:46	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 06:46	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 06:46	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 06:46	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 06:46	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 06:46	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 06:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 06:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 06:46	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 06:46	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 06:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:46	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-32D **Lab ID: 92478024006** Collected: 05/14/20 14:20 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 06:46	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 06:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:46	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 06:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 06:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 06:46	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 06:46	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 06:46	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 06:46	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 06:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 06:46	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 06:46	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		05/23/20 06:46	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 06:46	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 20:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	50-150	1		05/20/20 20:30	17060-07-0	
Toluene-d8 (S)	94	%	50-150	1		05/20/20 20:30	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-33D-295 **Lab ID: 92478024007** Collected: 05/14/20 15:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/24/20 04:13	67-64-1	
Benzene	ND	ug/L	1.0	1		05/24/20 04:13	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/24/20 04:13	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/24/20 04:13	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/24/20 04:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/24/20 04:13	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/24/20 04:13	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		05/24/20 04:13	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/24/20 04:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/24/20 04:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/24/20 04:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/24/20 04:13	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/24/20 04:13	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/24/20 04:13	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/24/20 04:13	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/24/20 04:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/24/20 04:13	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/24/20 04:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/24/20 04:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/24/20 04:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/24/20 04:13	107-06-2	
1,1-Dichloroethene	**4.4**	ug/L	1.0	1		05/24/20 04:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/20 04:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/20 04:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/24/20 04:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/24/20 04:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/24/20 04:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/24/20 04:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/20 04:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/20 04:13	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/24/20 04:13	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/24/20 04:13	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/24/20 04:13	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/24/20 04:13	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/24/20 04:13	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/24/20 04:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/24/20 04:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/24/20 04:13	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/24/20 04:13	91-20-3	
Styrene	ND	ug/L	1.0	1		05/24/20 04:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/20 04:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/20 04:13	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-33D-295 **Lab ID: 92478024007** Collected: 05/14/20 15:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/24/20 04:13	127-18-4	
Toluene	ND	ug/L	1.0	1		05/24/20 04:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	87-61-6	IH
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/24/20 04:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/24/20 04:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/24/20 04:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/24/20 04:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/24/20 04:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/24/20 04:13	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/24/20 04:13	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/24/20 04:13	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/24/20 04:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/24/20 04:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/24/20 04:13	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		05/24/20 04:13	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70-130	1		05/24/20 04:13	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		05/24/20 04:13	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**6.0**	ug/L	2.0	1		05/20/20 20:50	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	50-150	1		05/20/20 20:50	17060-07-0	
Toluene-d8 (S)	106	%	50-150	1		05/20/20 20:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-33D-235 **Lab ID: 92478024008** Collected: 05/14/20 15:15 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 06:28	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 06:28	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 06:28	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 06:28	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 06:28	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 06:28	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 06:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 06:28	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 06:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 06:28	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 06:28	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 06:28	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:28	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 06:28	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 06:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 06:28	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 06:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 06:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:28	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 06:28	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 06:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 06:28	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 06:28	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 06:28	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 06:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 06:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 06:28	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 06:28	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 06:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:28	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-33D-235 **Lab ID: 92478024008** Collected: 05/14/20 15:15 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 06:28	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 06:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 06:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 06:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 06:28	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 06:28	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 06:28	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 06:28	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 06:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 06:28	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 06:28	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/23/20 06:28	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		05/23/20 06:28	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 21:10	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	114	%	50-150	1		05/20/20 21:10	17060-07-0	
Toluene-d8 (S)	106	%	50-150	1		05/20/20 21:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-35D **Lab ID: 92478024009** Collected: 05/14/20 15:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 06:10	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 06:10	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 06:10	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 06:10	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 06:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 06:10	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 06:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 06:10	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 06:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 06:10	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 06:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 06:10	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:10	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 06:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 06:10	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 06:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 06:10	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 06:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 06:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 06:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 06:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 06:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 06:10	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 06:10	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 06:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 06:10	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 06:10	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 06:10	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 06:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 06:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 06:10	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 06:10	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 06:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 06:10	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-35D **Lab ID: 92478024009** Collected: 05/14/20 15:55 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 06:10	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 06:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 06:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 06:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 06:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 06:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 06:10	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 06:10	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 06:10	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 06:10	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 06:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 06:10	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		05/23/20 06:10	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		05/23/20 06:10	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 06:10	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 21:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	117	%	50-150	1		05/20/20 21:30	17060-07-0	
Toluene-d8 (S)	108	%	50-150	1		05/20/20 21:30	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-34D **Lab ID: 92478024010** Collected: 05/14/20 16:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/26/20 16:35	67-64-1	
Benzene	ND	ug/L	1.0	1		05/26/20 16:35	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/26/20 16:35	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/26/20 16:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/26/20 16:35	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/26/20 16:35	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/26/20 16:35	74-83-9	IH
2-Butanone (MEK)	ND	ug/L	5.0	1		05/26/20 16:35	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/26/20 16:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/26/20 16:35	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/26/20 16:35	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/26/20 16:35	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/26/20 16:35	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/26/20 16:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/26/20 16:35	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/26/20 16:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/26/20 16:35	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/26/20 16:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/26/20 16:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/26/20 16:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/26/20 16:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/26/20 16:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/26/20 16:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/26/20 16:35	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/26/20 16:35	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/26/20 16:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/26/20 16:35	87-68-3	IH
2-Hexanone	ND	ug/L	5.0	1		05/26/20 16:35	591-78-6	v1
p-Isopropyltoluene	ND	ug/L	1.0	1		05/26/20 16:35	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/26/20 16:35	75-09-2	v1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/26/20 16:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/26/20 16:35	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/26/20 16:35	91-20-3	
Styrene	ND	ug/L	1.0	1		05/26/20 16:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/26/20 16:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/26/20 16:35	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-34D **Lab ID: 92478024010** Collected: 05/14/20 16:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/26/20 16:35	127-18-4	
Toluene	ND	ug/L	1.0	1		05/26/20 16:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/26/20 16:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/26/20 16:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/26/20 16:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/26/20 16:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/26/20 16:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/26/20 16:35	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/26/20 16:35	108-05-4	v1
Vinyl chloride	ND	ug/L	1.0	1		05/26/20 16:35	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/26/20 16:35	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/26/20 16:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/26/20 16:35	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	1		05/26/20 16:35	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	70-130	1		05/26/20 16:35	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		05/26/20 16:35	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 21:50	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%	50-150	1		05/20/20 21:50	17060-07-0	
Toluene-d8 (S)	103	%	50-150	1		05/20/20 21:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-28D **Lab ID: 92478024011** Collected: 05/14/20 16:30 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 05:52	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 05:52	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 05:52	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 05:52	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 05:52	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 05:52	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 05:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 05:52	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 05:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 05:52	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 05:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 05:52	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:52	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 05:52	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 05:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 05:52	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 05:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 05:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 05:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 05:52	107-06-2	
1,1-Dichloroethene	**4.0**	ug/L	1.0	1		05/23/20 05:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:52	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 05:52	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 05:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 05:52	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 05:52	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 05:52	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 05:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 05:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 05:52	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 05:52	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 05:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:52	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-28D **Lab ID: 92478024011** Collected: 05/14/20 16:30 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 05:52	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 05:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 05:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 05:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 05:52	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 05:52	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 05:52	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 05:52	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 05:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 05:52	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 05:52	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/23/20 05:52	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 05:52	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**3.4**	ug/L	2.0	1		05/20/20 22:10	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	112	%	50-150	1		05/20/20 22:10	17060-07-0	
Toluene-d8 (S)	108	%	50-150	1		05/20/20 22:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-36D **Lab ID: 92478024012** Collected: 05/14/20 16:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 05:34	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 05:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 05:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 05:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 05:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 05:34	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 05:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 05:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 05:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 05:34	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 05:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 05:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 05:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 05:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 05:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 05:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 05:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/20 05:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 05:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 05:34	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 05:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 05:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 05:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 05:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 05:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 05:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 05:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 05:34	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 05:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:34	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-36D **Lab ID: 92478024012** Collected: 05/14/20 16:45 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 05:34	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 05:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 05:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 05:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 05:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 05:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 05:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 05:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 05:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 05:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 05:34	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		05/23/20 05:34	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		05/23/20 05:34	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		05/20/20 22:29	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	50-150	1		05/20/20 22:29	17060-07-0	
Toluene-d8 (S)	112	%	50-150	1		05/20/20 22:29	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: Dup051420 **Lab ID: 92478024013** Collected: 05/14/20 09:00 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 05:16	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 05:16	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 05:16	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 05:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 05:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 05:16	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 05:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 05:16	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 05:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 05:16	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 05:16	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 05:16	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:16	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 05:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 05:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 05:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 05:16	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 05:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 05:16	75-71-8	
1,1-Dichloroethane	**11.7**	ug/L	1.0	1		05/23/20 05:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 05:16	107-06-2	
1,1-Dichloroethene	**49.2**	ug/L	1.0	1		05/23/20 05:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 05:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 05:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 05:16	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 05:16	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 05:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 05:16	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 05:16	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 05:16	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 05:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 05:16	108-10-1	
Methyl-tert-butyl ether	**1.0**	ug/L	1.0	1		05/23/20 05:16	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 05:16	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 05:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 05:16	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: Dup051420 **Lab ID: 92478024013** Collected: 05/14/20 09:00 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 05:16	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 05:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 05:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 05:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 05:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 05:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 05:16	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 05:16	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 05:16	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 05:16	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 05:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 05:16	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		05/23/20 05:16	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/23/20 05:16	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		05/23/20 05:16	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**39.3**	ug/L	2.0	1		05/20/20 22:49	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%	50-150	1		05/20/20 22:49	17060-07-0	
Toluene-d8 (S)	103	%	50-150	1		05/20/20 22:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-25D-130 **Lab ID: 92478024014** Collected: 05/14/20 17:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/23/20 04:58	67-64-1	v1
Benzene	ND	ug/L	1.0	1		05/23/20 04:58	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/23/20 04:58	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/23/20 04:58	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/23/20 04:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/23/20 04:58	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/23/20 04:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		05/23/20 04:58	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/20 04:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/20 04:58	75-00-3	v2
Chloroform	ND	ug/L	5.0	1		05/23/20 04:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/20 04:58	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 04:58	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/23/20 04:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/23/20 04:58	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/23/20 04:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/23/20 04:58	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/23/20 04:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/23/20 04:58	75-71-8	
1,1-Dichloroethane	**3.3**	ug/L	1.0	1		05/23/20 04:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/20 04:58	107-06-2	
1,1-Dichloroethene	**69.1**	ug/L	1.0	1		05/23/20 04:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 04:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/20 04:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 04:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/23/20 04:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/23/20 04:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/23/20 04:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 04:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/20 04:58	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/23/20 04:58	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/23/20 04:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/23/20 04:58	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/23/20 04:58	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/23/20 04:58	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/23/20 04:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/23/20 04:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		05/23/20 04:58	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/23/20 04:58	91-20-3	
Styrene	ND	ug/L	1.0	1		05/23/20 04:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 04:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/20 04:58	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-25D-130 **Lab ID: 92478024014** Collected: 05/14/20 17:05 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/23/20 04:58	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/20 04:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/23/20 04:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/20 04:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/20 04:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/20 04:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/23/20 04:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/23/20 04:58	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/23/20 04:58	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/23/20 04:58	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/23/20 04:58	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/23/20 04:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/23/20 04:58	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		05/23/20 04:58	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		05/23/20 04:58	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		05/23/20 04:58	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**32.6**	ug/L	2.0	1		05/20/20 23:09	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	50-150	1		05/20/20 23:09	17060-07-0	
Toluene-d8 (S)	100	%	50-150	1		05/20/20 23:09	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-25D-190 **Lab ID: 92478024015** Collected: 05/14/20 17:10 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		05/24/20 06:19	67-64-1	
Benzene	ND	ug/L	1.0	1		05/24/20 06:19	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		05/24/20 06:19	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		05/24/20 06:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		05/24/20 06:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		05/24/20 06:19	75-25-2	
Bromomethane	ND	ug/L	2.0	1		05/24/20 06:19	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		05/24/20 06:19	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		05/24/20 06:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/24/20 06:19	75-00-3	
Chloroform	ND	ug/L	5.0	1		05/24/20 06:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/24/20 06:19	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		05/24/20 06:19	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		05/24/20 06:19	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		05/24/20 06:19	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		05/24/20 06:19	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		05/24/20 06:19	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		05/24/20 06:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		05/24/20 06:19	75-71-8	
1,1-Dichloroethane	**12.8**	ug/L	1.0	1		05/24/20 06:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/24/20 06:19	107-06-2	
1,1-Dichloroethene	**58.0**	ug/L	1.0	1		05/24/20 06:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/20 06:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/20 06:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/24/20 06:19	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		05/24/20 06:19	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		05/24/20 06:19	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		05/24/20 06:19	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/20 06:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/20 06:19	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		05/24/20 06:19	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		05/24/20 06:19	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		05/24/20 06:19	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		05/24/20 06:19	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		05/24/20 06:19	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		05/24/20 06:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		05/24/20 06:19	108-10-1	
Methyl-tert-butyl ether	**1.1**	ug/L	1.0	1		05/24/20 06:19	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		05/24/20 06:19	91-20-3	
Styrene	ND	ug/L	1.0	1		05/24/20 06:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/20 06:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/20 06:19	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop-Flex offsite
Pace Project No.: 92478024

Sample: MW-25D-190 **Lab ID: 92478024015** Collected: 05/14/20 17:10 Received: 05/18/20 09:12 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		05/24/20 06:19	127-18-4	
Toluene	ND	ug/L	1.0	1		05/24/20 06:19	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	87-61-6	IH
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		05/24/20 06:19	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/24/20 06:19	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/24/20 06:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/24/20 06:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		05/24/20 06:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		05/24/20 06:19	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		05/24/20 06:19	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		05/24/20 06:19	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		05/24/20 06:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		05/24/20 06:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		05/24/20 06:19	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		05/24/20 06:19	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70-130	1		05/24/20 06:19	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		05/24/20 06:19	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**41.1**	ug/L	2.0	1		05/20/20 23:28	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	50-150	1		05/20/20 23:28	17060-07-0	
Toluene-d8 (S)	100	%	50-150	1		05/20/20 23:28	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

QC Batch: 542927
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92478024007, 92478024015

METHOD BLANK: 2892230
Matrix: Water
Associated Lab Samples: 92478024007, 92478024015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,1,1-Trichloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,1,2-Trichloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,1-Dichloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,1-Dichloroethene	ug/L	ND	1.0	05/24/20 00:00	
1,1-Dichloropropene	ug/L	ND	1.0	05/24/20 00:00	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	05/24/20 00:00	IH
1,2,3-Trichloropropane	ug/L	ND	1.0	05/24/20 00:00	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	05/24/20 00:00	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	05/24/20 00:00	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	05/24/20 00:00	
1,2-Dichlorobenzene	ug/L	ND	1.0	05/24/20 00:00	
1,2-Dichloroethane	ug/L	ND	1.0	05/24/20 00:00	
1,2-Dichloropropane	ug/L	ND	1.0	05/24/20 00:00	
1,3-Dichlorobenzene	ug/L	ND	1.0	05/24/20 00:00	
1,3-Dichloropropane	ug/L	ND	1.0	05/24/20 00:00	
1,4-Dichlorobenzene	ug/L	ND	1.0	05/24/20 00:00	
2,2-Dichloropropane	ug/L	ND	1.0	05/24/20 00:00	
2-Butanone (MEK)	ug/L	ND	5.0	05/24/20 00:00	
2-Chlorotoluene	ug/L	ND	1.0	05/24/20 00:00	
2-Hexanone	ug/L	ND	5.0	05/24/20 00:00	
4-Chlorotoluene	ug/L	ND	1.0	05/24/20 00:00	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	05/24/20 00:00	
Acetone	ug/L	ND	25.0	05/24/20 00:00	
Benzene	ug/L	ND	1.0	05/24/20 00:00	
Bromobenzene	ug/L	ND	1.0	05/24/20 00:00	
Bromochloromethane	ug/L	ND	1.0	05/24/20 00:00	
Bromodichloromethane	ug/L	ND	1.0	05/24/20 00:00	
Bromoform	ug/L	ND	1.0	05/24/20 00:00	
Bromomethane	ug/L	ND	2.0	05/24/20 00:00	v2
Carbon tetrachloride	ug/L	ND	1.0	05/24/20 00:00	
Chlorobenzene	ug/L	ND	1.0	05/24/20 00:00	
Chloroethane	ug/L	ND	1.0	05/24/20 00:00	
Chloroform	ug/L	ND	5.0	05/24/20 00:00	
Chloromethane	ug/L	ND	1.0	05/24/20 00:00	
cis-1,2-Dichloroethene	ug/L	ND	1.0	05/24/20 00:00	
cis-1,3-Dichloropropene	ug/L	ND	1.0	05/24/20 00:00	
Dibromochloromethane	ug/L	ND	1.0	05/24/20 00:00	
Dibromomethane	ug/L	ND	1.0	05/24/20 00:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

METHOD BLANK: 2892230 Matrix: Water
Associated Lab Samples: 92478024007, 92478024015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	05/24/20 00:00	
Diisopropyl ether	ug/L	ND	1.0	05/24/20 00:00	
Ethylbenzene	ug/L	ND	1.0	05/24/20 00:00	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/24/20 00:00	
m&p-Xylene	ug/L	ND	2.0	05/24/20 00:00	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/24/20 00:00	
Methylene Chloride	ug/L	ND	5.0	05/24/20 00:00	
Naphthalene	ug/L	ND	1.0	05/24/20 00:00	
o-Xylene	ug/L	ND	1.0	05/24/20 00:00	
p-Isopropyltoluene	ug/L	ND	1.0	05/24/20 00:00	
Styrene	ug/L	ND	1.0	05/24/20 00:00	
Tetrachloroethene	ug/L	ND	1.0	05/24/20 00:00	
Toluene	ug/L	ND	1.0	05/24/20 00:00	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/24/20 00:00	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/24/20 00:00	
Trichloroethene	ug/L	ND	1.0	05/24/20 00:00	
Trichlorofluoromethane	ug/L	ND	1.0	05/24/20 00:00	
Vinyl acetate	ug/L	ND	2.0	05/24/20 00:00	
Vinyl chloride	ug/L	ND	1.0	05/24/20 00:00	
Xylene (Total)	ug/L	ND	1.0	05/24/20 00:00	
1,2-Dichloroethane-d4 (S)	%	108	70-130	05/24/20 00:00	
4-Bromofluorobenzene (S)	%	99	70-130	05/24/20 00:00	
Toluene-d8 (S)	%	102	70-130	05/24/20 00:00	

LABORATORY CONTROL SAMPLE: 2892231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.5	101	70-130	
1,1,1-Trichloroethane	ug/L	50	54.7	109	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	51.4	103	70-130	
1,1,2-Trichloroethane	ug/L	50	50.9	102	70-130	
1,1-Dichloroethane	ug/L	50	50.3	101	70-130	
1,1-Dichloroethene	ug/L	50	55.0	110	70-130	
1,1-Dichloropropene	ug/L	50	52.5	105	70-130	
1,2,3-Trichlorobenzene	ug/L	50	60.5	121	70-130	IH
1,2,3-Trichloropropane	ug/L	50	47.6	95	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.4	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	52.0	104	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	52.6	105	70-130	
1,2-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,2-Dichloroethane	ug/L	50	52.4	105	70-130	
1,2-Dichloropropane	ug/L	50	50.5	101	70-130	
1,3-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,3-Dichloropropane	ug/L	50	50.7	101	70-131	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

LABORATORY CONTROL SAMPLE: 2892231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	49.3	99	70-130	
2,2-Dichloropropane	ug/L	50	44.2	88	69-130	
2-Butanone (MEK)	ug/L	100	106	106	64-135	
2-Chlorotoluene	ug/L	50	46.8	94	70-130	
2-Hexanone	ug/L	100	109	109	66-135	
4-Chlorotoluene	ug/L	50	48.7	97	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	70-130	
Acetone	ug/L	100	106	106	61-157	
Benzene	ug/L	50	51.4	103	70-130	
Bromobenzene	ug/L	50	46.8	94	70-130	
Bromochloromethane	ug/L	50	50.4	101	70-130	
Bromodichloromethane	ug/L	50	53.9	108	70-130	
Bromoform	ug/L	50	43.8	88	70-130	
Bromomethane	ug/L	50	33.3	67	38-130	v3
Carbon tetrachloride	ug/L	50	58.2	116	70-130	
Chlorobenzene	ug/L	50	50.6	101	70-130	
Chloroethane	ug/L	50	43.6	87	37-142	
Chloroform	ug/L	50	52.8	106	70-130	
Chloromethane	ug/L	50	34.8	70	48-130	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.6	99	70-130	
Dibromochloromethane	ug/L	50	48.7	97	70-130	
Dibromomethane	ug/L	50	52.3	105	70-130	
Dichlorodifluoromethane	ug/L	50	46.5	93	53-134	
Diisopropyl ether	ug/L	50	53.9	108	70-135	
Ethylbenzene	ug/L	50	48.1	96	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.8	102	68-132	
m&p-Xylene	ug/L	100	95.3	95	70-130	
Methyl-tert-butyl ether	ug/L	50	52.7	105	70-130	
Methylene Chloride	ug/L	50	52.9	106	67-132	
Naphthalene	ug/L	50	59.5	119	70-130	
o-Xylene	ug/L	50	49.0	98	70-131	
p-Isopropyltoluene	ug/L	50	48.1	96	70-130	
Styrene	ug/L	50	52.3	105	70-130	
Tetrachloroethene	ug/L	50	52.0	104	69-130	
Toluene	ug/L	50	48.4	97	70-130	
trans-1,2-Dichloroethene	ug/L	50	54.4	109	70-130	
trans-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Trichloroethene	ug/L	50	50.5	101	70-130	
Trichlorofluoromethane	ug/L	50	45.7	91	63-130	
Vinyl acetate	ug/L	100	96.7	97	55-143	
Vinyl chloride	ug/L	50	52.3	105	70-131	
Xylene (Total)	ug/L	150	144	96	70-130	
1,2-Dichloroethane-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			100	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

MATRIX SPIKE SAMPLE: 2892233

Parameter	Units	92478024015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.5	107	73-134	
1,1,1-Trichloroethane	ug/L	ND	20	34.9	175	82-143	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.3	102	70-136	
1,1,2-Trichloroethane	ug/L	ND	20	21.9	109	70-135	
1,1-Dichloroethane	ug/L	12.8	20	36.2	117	70-139	
1,1-Dichloroethene	ug/L	58.0	20	87.1	146	70-154	
1,1-Dichloropropene	ug/L	ND	20	24.0	120	70-149	
1,2,3-Trichlorobenzene	ug/L	ND	20	22.7	113	70-135	IH
1,2,3-Trichloropropane	ug/L	ND	20	18.5	93	71-137	
1,2,4-Trichlorobenzene	ug/L	ND	20	22.2	111	73-140	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	21.0	105	65-134	
1,2-Dibromoethane (EDB)	ug/L	ND	20	21.8	109	70-137	
1,2-Dichlorobenzene	ug/L	ND	20	20.7	104	70-133	
1,2-Dichloroethane	ug/L	ND	20	22.4	108	70-137	
1,2-Dichloropropane	ug/L	ND	20	21.6	108	70-140	
1,3-Dichlorobenzene	ug/L	ND	20	21.0	105	70-135	
1,3-Dichloropropane	ug/L	ND	20	21.3	107	70-143	
1,4-Dichlorobenzene	ug/L	ND	20	20.1	100	70-133	
2,2-Dichloropropane	ug/L	ND	20	24.6	123	61-148	
2-Butanone (MEK)	ug/L	ND	40	48.6	121	60-139	
2-Chlorotoluene	ug/L	ND	20	19.4	97	70-144	
2-Hexanone	ug/L	ND	40	44.2	111	65-138	
4-Chlorotoluene	ug/L	ND	20	21.1	105	70-137	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	44.7	112	65-135	
Acetone	ug/L	ND	40	45.4	114	60-148	
Benzene	ug/L	ND	20	21.7	109	70-151	
Bromobenzene	ug/L	ND	20	20.1	100	70-136	
Bromochloromethane	ug/L	ND	20	22.7	113	70-141	
Bromodichloromethane	ug/L	ND	20	23.6	118	70-138	
Bromoform	ug/L	ND	20	19.4	97	63-130	
Bromomethane	ug/L	ND	20	19.4	97	15-152	
Carbon tetrachloride	ug/L	ND	20	25.4	127	70-143	
Chlorobenzene	ug/L	ND	20	20.4	102	70-138	
Chloroethane	ug/L	ND	20	22.3	111	52-163	
Chloroform	ug/L	ND	20	24.2	121	70-139	
Chloromethane	ug/L	ND	20	19.8	99	41-139	
cis-1,2-Dichloroethene	ug/L	ND	20	22.1	111	70-141	
cis-1,3-Dichloropropene	ug/L	ND	20	22.3	112	70-137	
Dibromochloromethane	ug/L	ND	20	19.8	99	70-134	
Dibromomethane	ug/L	ND	20	21.9	109	70-138	
Dichlorodifluoromethane	ug/L	ND	20	24.7	124	47-155	
Diisopropyl ether	ug/L	ND	20	24.8	124	63-144	
Ethylbenzene	ug/L	ND	20	20.1	101	66-153	
Hexachloro-1,3-butadiene	ug/L	ND	20	20.6	103	65-149	
m&p-Xylene	ug/L	ND	40	40.0	100	69-152	
Methyl-tert-butyl ether	ug/L	1.1	20	24.5	117	54-156	
Methylene Chloride	ug/L	ND	20	23.9	120	42-159	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

MATRIX SPIKE SAMPLE: 2892233

Parameter	Units	92478024015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	ND	20	22.2	111	61-148	
o-Xylene	ug/L	ND	20	19.8	99	70-148	
p-Isopropyltoluene	ug/L	ND	20	20.9	104	70-146	
Styrene	ug/L	ND	20	20.8	104	70-135	
Tetrachloroethene	ug/L	ND	20	22.2	111	59-143	
Toluene	ug/L	ND	20	21.0	105	59-148	
trans-1,2-Dichloroethene	ug/L	ND	20	23.2	116	70-146	
trans-1,3-Dichloropropene	ug/L	ND	20	22.3	112	70-135	
Trichloroethene	ug/L	ND	20	22.5	113	70-147	
Trichlorofluoromethane	ug/L	ND	20	25.0	125	70-148	
Vinyl acetate	ug/L	ND	40	44.8	112	49-151	
Vinyl chloride	ug/L	ND	20	25.2	126	70-156	
Xylene (Total)	ug/L	ND	60	59.8	100	63-158	
1,2-Dichloroethane-d4 (S)	%				111	70-130	
4-Bromofluorobenzene (S)	%				105	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 2892232

Parameter	Units	92478032010 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	IH
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	ND	ND		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

SAMPLE DUPLICATE: 2892232

Parameter	Units	92478032010 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	v2
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	118	115			
4-Bromofluorobenzene (S)	%	99	95			
Toluene-d8 (S)	%	100	101			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

QC Batch: 542931
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92478024002, 92478024004, 92478024005, 92478024006, 92478024008, 92478024009, 92478024011, 92478024012, 92478024013, 92478024014

METHOD BLANK: 2892263
Matrix: Water
Associated Lab Samples: 92478024002, 92478024004, 92478024005, 92478024006, 92478024008, 92478024009, 92478024011, 92478024012, 92478024013, 92478024014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,1,1-Trichloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,1,2-Trichloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,1-Dichloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,1-Dichloroethene	ug/L	ND	1.0	05/22/20 22:41	
1,1-Dichloropropene	ug/L	ND	1.0	05/22/20 22:41	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
1,2,3-Trichloropropane	ug/L	ND	1.0	05/22/20 22:41	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	05/22/20 22:41	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	05/22/20 22:41	
1,2-Dichlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
1,2-Dichloroethane	ug/L	ND	1.0	05/22/20 22:41	
1,2-Dichloropropane	ug/L	ND	1.0	05/22/20 22:41	
1,3-Dichlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
1,3-Dichloropropane	ug/L	ND	1.0	05/22/20 22:41	
1,4-Dichlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
2,2-Dichloropropane	ug/L	ND	1.0	05/22/20 22:41	
2-Butanone (MEK)	ug/L	ND	5.0	05/22/20 22:41	
2-Chlorotoluene	ug/L	ND	1.0	05/22/20 22:41	
2-Hexanone	ug/L	ND	5.0	05/22/20 22:41	
4-Chlorotoluene	ug/L	ND	1.0	05/22/20 22:41	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	05/22/20 22:41	
Acetone	ug/L	ND	25.0	05/22/20 22:41	v1
Benzene	ug/L	ND	1.0	05/22/20 22:41	
Bromobenzene	ug/L	ND	1.0	05/22/20 22:41	
Bromochloromethane	ug/L	ND	1.0	05/22/20 22:41	
Bromodichloromethane	ug/L	ND	1.0	05/22/20 22:41	
Bromoform	ug/L	ND	1.0	05/22/20 22:41	
Bromomethane	ug/L	ND	2.0	05/22/20 22:41	
Carbon tetrachloride	ug/L	ND	1.0	05/22/20 22:41	
Chlorobenzene	ug/L	ND	1.0	05/22/20 22:41	
Chloroethane	ug/L	ND	1.0	05/22/20 22:41	v2
Chloroform	ug/L	ND	5.0	05/22/20 22:41	
Chloromethane	ug/L	ND	1.0	05/22/20 22:41	
cis-1,2-Dichloroethene	ug/L	ND	1.0	05/22/20 22:41	
cis-1,3-Dichloropropene	ug/L	ND	1.0	05/22/20 22:41	
Dibromochloromethane	ug/L	ND	1.0	05/22/20 22:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

METHOD BLANK: 2892263 Matrix: Water

Associated Lab Samples: 92478024002, 92478024004, 92478024005, 92478024006, 92478024008, 92478024009, 92478024011, 92478024012, 92478024013, 92478024014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	05/22/20 22:41	
Dichlorodifluoromethane	ug/L	ND	1.0	05/22/20 22:41	
Diisopropyl ether	ug/L	ND	1.0	05/22/20 22:41	
Ethylbenzene	ug/L	ND	1.0	05/22/20 22:41	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/22/20 22:41	
m&p-Xylene	ug/L	ND	2.0	05/22/20 22:41	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/22/20 22:41	
Methylene Chloride	ug/L	ND	5.0	05/22/20 22:41	
Naphthalene	ug/L	ND	1.0	05/22/20 22:41	
o-Xylene	ug/L	ND	1.0	05/22/20 22:41	
p-Isopropyltoluene	ug/L	ND	1.0	05/22/20 22:41	
Styrene	ug/L	ND	1.0	05/22/20 22:41	
Tetrachloroethene	ug/L	ND	1.0	05/22/20 22:41	
Toluene	ug/L	ND	1.0	05/22/20 22:41	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/22/20 22:41	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/22/20 22:41	
Trichloroethene	ug/L	ND	1.0	05/22/20 22:41	
Trichlorofluoromethane	ug/L	ND	1.0	05/22/20 22:41	
Vinyl acetate	ug/L	ND	2.0	05/22/20 22:41	
Vinyl chloride	ug/L	ND	1.0	05/22/20 22:41	
Xylene (Total)	ug/L	ND	1.0	05/22/20 22:41	
1,2-Dichloroethane-d4 (S)	%	102	70-130	05/22/20 22:41	
4-Bromofluorobenzene (S)	%	97	70-130	05/22/20 22:41	
Toluene-d8 (S)	%	102	70-130	05/22/20 22:41	

LABORATORY CONTROL SAMPLE: 2892264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.7	107	70-130	
1,1,1-Trichloroethane	ug/L	50	52.3	105	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	70-130	
1,1,2-Trichloroethane	ug/L	50	52.4	105	70-130	
1,1-Dichloroethane	ug/L	50	51.4	103	70-130	
1,1-Dichloroethene	ug/L	50	53.3	107	70-130	
1,1-Dichloropropene	ug/L	50	53.2	106	70-130	
1,2,3-Trichlorobenzene	ug/L	50	52.8	106	70-130	
1,2,3-Trichloropropane	ug/L	50	51.9	104	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.4	107	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	56.3	113	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	54.9	110	70-130	
1,2-Dichlorobenzene	ug/L	50	54.1	108	70-130	
1,2-Dichloroethane	ug/L	50	51.9	104	70-130	
1,2-Dichloropropane	ug/L	50	52.9	106	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

LABORATORY CONTROL SAMPLE: 2892264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	50	53.8	108	70-130	
1,3-Dichloropropane	ug/L	50	53.5	107	70-131	
1,4-Dichlorobenzene	ug/L	50	54.1	108	70-130	
2,2-Dichloropropane	ug/L	50	54.7	109	69-130	
2-Butanone (MEK)	ug/L	100	109	109	64-135	
2-Chlorotoluene	ug/L	50	52.0	104	70-130	
2-Hexanone	ug/L	100	106	106	66-135	
4-Chlorotoluene	ug/L	50	52.9	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	70-130	
Acetone	ug/L	100	120	120	61-157	v1
Benzene	ug/L	50	52.4	105	70-130	
Bromobenzene	ug/L	50	53.2	106	70-130	
Bromochloromethane	ug/L	50	57.0	114	70-130	
Bromodichloromethane	ug/L	50	54.0	108	70-130	
Bromoform	ug/L	50	55.2	110	70-130	
Bromomethane	ug/L	50	49.5	99	38-130	
Carbon tetrachloride	ug/L	50	53.8	108	70-130	
Chlorobenzene	ug/L	50	54.6	109	70-130	
Chloroethane	ug/L	50	37.1	74	37-142	v3
Chloroform	ug/L	50	50.1	100	70-130	
Chloromethane	ug/L	50	42.6	85	48-130	
cis-1,2-Dichloroethene	ug/L	50	52.0	104	70-130	
cis-1,3-Dichloropropene	ug/L	50	53.6	107	70-130	
Dibromochloromethane	ug/L	50	55.0	110	70-130	
Dibromomethane	ug/L	50	53.9	108	70-130	
Dichlorodifluoromethane	ug/L	50	48.6	97	53-134	
Diisopropyl ether	ug/L	50	53.1	106	70-135	
Ethylbenzene	ug/L	50	50.5	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.2	102	68-132	
m&p-Xylene	ug/L	100	102	102	70-130	
Methyl-tert-butyl ether	ug/L	50	53.4	107	70-130	
Methylene Chloride	ug/L	50	52.2	104	67-132	
Naphthalene	ug/L	50	52.2	104	70-130	
o-Xylene	ug/L	50	52.1	104	70-131	
p-Isopropyltoluene	ug/L	50	54.2	108	70-130	
Styrene	ug/L	50	56.1	112	70-130	
Tetrachloroethene	ug/L	50	51.9	104	69-130	
Toluene	ug/L	50	49.9	100	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.1	104	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.7	107	70-130	
Trichloroethene	ug/L	50	54.8	110	70-130	
Trichlorofluoromethane	ug/L	50	47.1	94	63-130	
Vinyl acetate	ug/L	100	111	111	55-143	
Vinyl chloride	ug/L	50	56.7	113	70-131	
Xylene (Total)	ug/L	150	154	103	70-130	
1,2-Dichloroethane-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

LABORATORY CONTROL SAMPLE: 2892264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2892247 2892248

Parameter	Units	92478024002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.2	20.4	101	102	73-134	1	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	29.8	24.3	149	121	82-143	20	30	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.8	19.7	99	99	70-136	0	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.0	19.9	100	100	70-135	0	30	
1,1-Dichloroethane	ug/L	20.7	20	20	44.3	30.6	118	50	70-139	36	30	M1,R1
1,1-Dichloroethene	ug/L	97.9	20	20	136	71.7	192	-131	70-154	62	30	M1,R1
1,1-Dichloropropene	ug/L	ND	20	20	21.0	21.3	105	106	70-149	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	18.9	18.9	95	94	70-135	0	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	19.6	19.5	98	98	71-137	0	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	18.7	19.0	94	95	73-140	2	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	21.2	20.9	106	105	65-134	1	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20.9	20.5	104	103	70-137	2	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	19.4	19.7	97	99	70-133	2	30	
1,2-Dichloroethane	ug/L	1.4	20	20	20.9	20.5	97	95	70-137	2	30	
1,2-Dichloropropane	ug/L	ND	20	20	19.9	20.1	99	100	70-140	1	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.2	19.7	96	99	70-135	3	30	
1,3-Dichloropropane	ug/L	ND	20	20	19.9	20.5	99	103	70-143	3	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.2	19.8	96	99	70-133	3	30	
2,2-Dichloropropane	ug/L	ND	20	20	22.1	22.1	111	110	61-148	0	30	
2-Butanone (MEK)	ug/L	ND	40	40	44.9	43.8	112	110	60-139	2	30	
2-Chlorotoluene	ug/L	ND	20	20	19.3	19.6	97	98	70-144	1	30	
2-Hexanone	ug/L	ND	40	40	43.9	43.1	110	108	65-138	2	30	
4-Chlorotoluene	ug/L	ND	20	20	19.3	19.7	97	99	70-137	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	43.4	42.8	109	107	65-135	2	30	
Acetone	ug/L	ND	40	40	43.8	43.8	109	109	60-148	0	30	
Benzene	ug/L	ND	20	20	20.4	19.9	102	100	70-151	2	30	
Bromobenzene	ug/L	ND	20	20	19.7	20.3	99	101	70-136	3	30	
Bromochloromethane	ug/L	ND	20	20	20.6	21.0	103	105	70-141	2	30	
Bromodichloromethane	ug/L	ND	20	20	20.8	20.6	104	103	70-138	1	30	
Bromoform	ug/L	ND	20	20	19.8	19.7	99	99	63-130	0	30	
Bromomethane	ug/L	ND	20	20	23.5	24.3	117	122	15-152	4	30	v3
Carbon tetrachloride	ug/L	ND	20	20	22.0	21.3	110	106	70-143	4	30	
Chlorobenzene	ug/L	ND	20	20	20.4	20.6	102	103	70-138	1	30	
Chloroethane	ug/L	ND	20	20	20.3	19.4	101	97	52-163	4	30	
Chloroform	ug/L	ND	20	20	19.7	19.9	97	98	70-139	1	30	
Chloromethane	ug/L	ND	20	20	18.4	18.5	92	92	41-139	0	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.3	20.7	101	103	70-141	2	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.4	20.4	102	102	70-137	0	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2892247 2892248

Parameter	Units	92478024002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromochloromethane	ug/L	ND	20	20	20.3	20.6	102	103	70-134	2	30	
Dibromomethane	ug/L	ND	20	20	19.9	20.1	99	100	70-138	1	30	
Dichlorodifluoromethane	ug/L	ND	20	20	19.9	20.3	99	101	47-155	2	30	
Diisopropyl ether	ug/L	ND	20	20	21.0	21.1	105	105	63-144	0	30	
Ethylbenzene	ug/L	ND	20	20	19.1	19.3	96	96	66-153	1	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	20.0	19.8	100	99	65-149	1	30	
m&p-Xylene	ug/L	ND	40	40	38.3	38.7	96	97	69-152	1	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	21.2	21.1	106	105	54-156	1	30	
Methylene Chloride	ug/L	ND	20	20	21.3	21.8	107	109	42-159	2	30	
Naphthalene	ug/L	ND	20	20	18.8	18.4	94	92	61-148	2	30	
o-Xylene	ug/L	ND	20	20	19.5	19.6	98	98	70-148	0	30	
p-Isopropyltoluene	ug/L	ND	20	20	20.2	20.8	101	104	70-146	3	30	
Styrene	ug/L	ND	20	20	19.8	20.0	99	100	70-135	1	30	
Tetrachloroethene	ug/L	ND	20	20	20.2	19.9	101	100	59-143	1	30	
Toluene	ug/L	ND	20	20	19.6	19.0	98	95	59-148	3	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.4	21.1	102	106	70-146	3	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.4	19.9	102	99	70-135	2	30	
Trichloroethene	ug/L	ND	20	20	22.0	21.2	110	106	70-147	4	30	
Trichlorofluoromethane	ug/L	ND	20	20	20.4	20.8	102	104	70-148	2	30	
Vinyl acetate	ug/L	ND	40	40	43.6	43.2	109	108	49-151	1	30	
Vinyl chloride	ug/L	ND	20	20	23.1	23.3	115	116	70-156	1	30	
Xylene (Total)	ug/L	ND	60	60	57.9	58.4	96	97	63-158	1	30	
1,2-Dichloroethane-d4 (S)	%						98	103	70-130			
4-Bromofluorobenzene (S)	%						99	98	70-130			
Toluene-d8 (S)	%						100	98	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

QC Batch: 543382
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92478024001, 92478024003, 92478024010

METHOD BLANK: 2894165
Matrix: Water
Associated Lab Samples: 92478024001, 92478024003, 92478024010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,1,1-Trichloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,1,2-Trichloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,1-Dichloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,1-Dichloroethene	ug/L	ND	1.0	05/26/20 12:50	
1,1-Dichloropropene	ug/L	ND	1.0	05/26/20 12:50	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
1,2,3-Trichloropropane	ug/L	ND	1.0	05/26/20 12:50	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	05/26/20 12:50	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	05/26/20 12:50	
1,2-Dichlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
1,2-Dichloroethane	ug/L	ND	1.0	05/26/20 12:50	
1,2-Dichloropropane	ug/L	ND	1.0	05/26/20 12:50	
1,3-Dichlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
1,3-Dichloropropane	ug/L	ND	1.0	05/26/20 12:50	
1,4-Dichlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
2,2-Dichloropropane	ug/L	ND	1.0	05/26/20 12:50	
2-Butanone (MEK)	ug/L	ND	5.0	05/26/20 12:50	
2-Chlorotoluene	ug/L	ND	1.0	05/26/20 12:50	
2-Hexanone	ug/L	ND	5.0	05/26/20 12:50	v1
4-Chlorotoluene	ug/L	ND	1.0	05/26/20 12:50	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	05/26/20 12:50	
Acetone	ug/L	ND	25.0	05/26/20 12:50	
Benzene	ug/L	ND	1.0	05/26/20 12:50	
Bromobenzene	ug/L	ND	1.0	05/26/20 12:50	
Bromochloromethane	ug/L	ND	1.0	05/26/20 12:50	
Bromodichloromethane	ug/L	ND	1.0	05/26/20 12:50	
Bromoform	ug/L	ND	1.0	05/26/20 12:50	
Bromomethane	ug/L	ND	2.0	05/26/20 12:50	IH
Carbon tetrachloride	ug/L	ND	1.0	05/26/20 12:50	
Chlorobenzene	ug/L	ND	1.0	05/26/20 12:50	
Chloroethane	ug/L	ND	1.0	05/26/20 12:50	
Chloroform	ug/L	ND	5.0	05/26/20 12:50	
Chloromethane	ug/L	ND	1.0	05/26/20 12:50	
cis-1,2-Dichloroethene	ug/L	ND	1.0	05/26/20 12:50	
cis-1,3-Dichloropropene	ug/L	ND	1.0	05/26/20 12:50	
Dibromochloromethane	ug/L	ND	1.0	05/26/20 12:50	
Dibromomethane	ug/L	ND	1.0	05/26/20 12:50	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

METHOD BLANK: 2894165 Matrix: Water
Associated Lab Samples: 92478024001, 92478024003, 92478024010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	05/26/20 12:50	
Diisopropyl ether	ug/L	ND	1.0	05/26/20 12:50	
Ethylbenzene	ug/L	ND	1.0	05/26/20 12:50	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/26/20 12:50	IH
m&p-Xylene	ug/L	ND	2.0	05/26/20 12:50	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/26/20 12:50	
Methylene Chloride	ug/L	ND	5.0	05/26/20 12:50	v1
Naphthalene	ug/L	ND	1.0	05/26/20 12:50	
o-Xylene	ug/L	ND	1.0	05/26/20 12:50	
p-Isopropyltoluene	ug/L	ND	1.0	05/26/20 12:50	
Styrene	ug/L	ND	1.0	05/26/20 12:50	
Tetrachloroethene	ug/L	ND	1.0	05/26/20 12:50	
Toluene	ug/L	ND	1.0	05/26/20 12:50	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/26/20 12:50	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/26/20 12:50	
Trichloroethene	ug/L	ND	1.0	05/26/20 12:50	
Trichlorofluoromethane	ug/L	ND	1.0	05/26/20 12:50	
Vinyl acetate	ug/L	ND	2.0	05/26/20 12:50	v1
Vinyl chloride	ug/L	ND	1.0	05/26/20 12:50	
Xylene (Total)	ug/L	ND	1.0	05/26/20 12:50	
1,2-Dichloroethane-d4 (S)	%	115	70-130	05/26/20 12:50	
4-Bromofluorobenzene (S)	%	100	70-130	05/26/20 12:50	
Toluene-d8 (S)	%	98	70-130	05/26/20 12:50	

LABORATORY CONTROL SAMPLE: 2894166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.2	108	70-130	
1,1,1-Trichloroethane	ug/L	50	49.3	99	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	53.0	106	70-130	
1,1,2-Trichloroethane	ug/L	50	47.6	95	70-130	
1,1-Dichloroethane	ug/L	50	51.9	104	70-130	
1,1-Dichloroethene	ug/L	50	56.0	112	70-130	
1,1-Dichloropropene	ug/L	50	50.5	101	70-130	
1,2,3-Trichlorobenzene	ug/L	50	50.1	100	70-130	
1,2,3-Trichloropropane	ug/L	50	51.5	103	70-130	
1,2,4-Trichlorobenzene	ug/L	50	52.4	105	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	44.4	89	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	54.1	108	70-130	
1,2-Dichlorobenzene	ug/L	50	55.5	111	70-130	
1,2-Dichloroethane	ug/L	50	52.3	105	70-130	
1,2-Dichloropropane	ug/L	50	53.1	106	70-130	
1,3-Dichlorobenzene	ug/L	50	55.7	111	70-130	
1,3-Dichloropropane	ug/L	50	56.2	112	70-131	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

LABORATORY CONTROL SAMPLE: 2894166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	53.8	108	70-130	
2,2-Dichloropropane	ug/L	50	48.4	97	69-130	
2-Butanone (MEK)	ug/L	100	112	112	64-135	
2-Chlorotoluene	ug/L	50	54.3	109	70-130	
2-Hexanone	ug/L	100	123	123	66-135	v1
4-Chlorotoluene	ug/L	50	54.8	110	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	113	113	70-130	
Acetone	ug/L	100	115	115	61-157	
Benzene	ug/L	50	52.4	105	70-130	
Bromobenzene	ug/L	50	54.5	109	70-130	
Bromochloromethane	ug/L	50	45.8	92	70-130	
Bromodichloromethane	ug/L	50	49.0	98	70-130	
Bromoform	ug/L	50	50.8	102	70-130	
Bromomethane	ug/L	50	41.8	84	38-130	IH
Carbon tetrachloride	ug/L	50	52.6	105	70-130	
Chlorobenzene	ug/L	50	53.6	107	70-130	
Chloroethane	ug/L	50	42.2	84	37-142	
Chloroform	ug/L	50	49.5	99	70-130	
Chloromethane	ug/L	50	49.8	100	48-130	
cis-1,2-Dichloroethene	ug/L	50	51.2	102	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.5	99	70-130	
Dibromochloromethane	ug/L	50	55.7	111	70-130	
Dibromomethane	ug/L	50	50.5	101	70-130	
Dichlorodifluoromethane	ug/L	50	44.2	88	53-134	
Diisopropyl ether	ug/L	50	58.7	117	70-135	
Ethylbenzene	ug/L	50	54.9	110	70-130	
Hexachloro-1,3-butadiene	ug/L	50	49.7	99	68-132	IH
m&p-Xylene	ug/L	100	109	109	70-130	
Methyl-tert-butyl ether	ug/L	50	52.4	105	70-130	
Methylene Chloride	ug/L	50	60.8	122	67-132	v1
Naphthalene	ug/L	50	49.2	98	70-130	
o-Xylene	ug/L	50	54.1	108	70-131	
p-Isopropyltoluene	ug/L	50	56.8	114	70-130	
Styrene	ug/L	50	56.9	114	70-130	
Tetrachloroethene	ug/L	50	53.7	107	69-130	
Toluene	ug/L	50	46.8	94	70-130	
trans-1,2-Dichloroethene	ug/L	50	54.4	109	70-130	
trans-1,3-Dichloropropene	ug/L	50	49.1	98	70-130	
Trichloroethene	ug/L	50	50.5	101	70-130	
Trichlorofluoromethane	ug/L	50	43.4	87	63-130	
Vinyl acetate	ug/L	100	132	132	55-143	v1
Vinyl chloride	ug/L	50	50.9	102	70-131	
Xylene (Total)	ug/L	150	163	109	70-130	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			98	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2894167 2894168

Parameter	Units	92478005001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	100	100	120	139	120	139	73-134	15	30	H1,M1
1,1,1-Trichloroethane	ug/L	ND	100	100	122	140	122	140	82-143	14	30	H1
1,1,2,2-Tetrachloroethane	ug/L	ND	100	100	121	140	121	140	70-136	15	30	H1,M1
1,1,2-Trichloroethane	ug/L	ND	100	100	119	133	119	133	70-135	11	30	H1
1,1-Dichloroethane	ug/L	ND	100	100	139	149	139	149	70-139	6	30	H1,M1
1,1-Dichloroethene	ug/L	ND	100	100	147	164	147	164	70-154	11	30	H1,M1
1,1-Dichloropropene	ug/L	ND	100	100	131	147	131	147	70-149	11	30	H1
1,2,3-Trichlorobenzene	ug/L	ND	100	100	116	130	116	130	70-135	11	30	H1
1,2,3-Trichloropropane	ug/L	ND	100	100	123	144	123	144	71-137	16	30	H1,M1
1,2,4-Trichlorobenzene	ug/L	ND	100	100	123	123	123	123	73-140	0	30	H1
1,2-Dibromo-3-chloropropane	ug/L	ND	100	100	109	113	109	113	65-134	3	30	H1
1,2-Dibromoethane (EDB)	ug/L	ND	100	100	125	146	125	146	70-137	15	30	H1,M1
1,2-Dichlorobenzene	ug/L	ND	100	100	139	140	139	140	70-133	1	30	H1,M1
1,2-Dichloroethane	ug/L	ND	100	100	137	148	137	148	70-137	8	30	H1,M1
1,2-Dichloropropane	ug/L	ND	100	100	131	152	131	152	70-140	15	30	H1,M1
1,3-Dichlorobenzene	ug/L	ND	100	100	133	134	133	134	70-135	1	30	H1
1,3-Dichloropropane	ug/L	ND	100	100	134	156	134	156	70-143	15	30	H1,M1
1,4-Dichlorobenzene	ug/L	ND	100	100	130	134	130	134	70-133	3	30	H1,M1
2,2-Dichloropropane	ug/L	ND	100	100	128	138	128	138	61-148	7	30	H1
2-Butanone (MEK)	ug/L	ND	200	200	274	298	137	149	60-139	8	30	H1,M1
2-Chlorotoluene	ug/L	ND	100	100	145	143	145	143	70-144	1	30	H1,M1
2-Hexanone	ug/L	ND	200	200	279	324	139	162	65-138	15	30	H1,M1, v1
4-Chlorotoluene	ug/L	ND	100	100	134	136	134	136	70-137	1	30	H1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	200	200	285	322	139	157	65-135	12	30	H1,M1
Acetone	ug/L	ND	200	200	276	304	138	152	60-148	10	30	H1,M1
Benzene	ug/L	346	100	100	471	502	126	157	70-151	6	30	H1,M1
Bromobenzene	ug/L	ND	100	100	138	138	138	138	70-136	0	30	H1,M1
Bromochloromethane	ug/L	ND	100	100	122	135	122	135	70-141	10	30	H1
Bromodichloromethane	ug/L	ND	100	100	118	133	118	133	70-138	12	30	H1
Bromoform	ug/L	ND	100	100	106	117	106	117	63-130	9	30	H1
Bromomethane	ug/L	ND	100	100	136	163	136	163	15-152	18	30	H1,IH, M1
Carbon tetrachloride	ug/L	ND	100	100	127	142	127	142	70-143	12	30	H1
Chlorobenzene	ug/L	ND	100	100	134	148	134	148	70-138	10	30	H1,M1
Chloroethane	ug/L	ND	100	100	129	136	129	136	52-163	5	30	H1
Chloroform	ug/L	ND	100	100	127	140	127	140	70-139	10	30	H1,M1
Chloromethane	ug/L	ND	100	100	132	144	130	143	41-139	9	30	H1,M1
cis-1,2-Dichloroethene	ug/L	ND	100	100	134	149	134	149	70-141	10	30	H1,M1
cis-1,3-Dichloropropene	ug/L	ND	100	100	126	135	126	135	70-137	7	30	H1
Dibromochloromethane	ug/L	ND	100	100	122	131	122	131	70-134	7	30	H1
Dibromomethane	ug/L	ND	100	100	126	141	126	141	70-138	12	30	H1,M1
Dichlorodifluoromethane	ug/L	ND	100	100	121	131	121	131	47-155	7	30	H1
Diisopropyl ether	ug/L	8.9	100	100	158	174	149	165	63-144	10	30	H1,M1
Ethylbenzene	ug/L	205	100	100	327	347	122	141	66-153	6	30	H1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2894167 2894168

Parameter	Units	92478005001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Hexachloro-1,3-butadiene	ug/L	ND	100	100	132	135	132	135	65-149	2	30	H1,IH
m&p-Xylene	ug/L	719	200	200	969	998	125	140	69-152	3	30	H1
Methyl-tert-butyl ether	ug/L	27.4	100	100	157	168	129	141	54-156	7	30	H1
Methylene Chloride	ug/L	ND	100	100	155	170	155	170	42-159	9	30	H1,M1, v1
Naphthalene	ug/L	110	100	100	230	229	120	120	61-148	0	30	H1
o-Xylene	ug/L	378	100	100	512	521	135	143	70-148	2	30	H1
p-Isopropyltoluene	ug/L	ND	100	100	155	158	155	158	70-146	1	30	H1,M1
Styrene	ug/L	ND	100	100	135	144	132	141	70-135	7	30	H1,M1
Tetrachloroethene	ug/L	ND	100	100	128	147	128	147	59-143	14	30	H1,M1
Toluene	ug/L	644	100	100	747	776	103	133	59-148	4	30	H1
trans-1,2-Dichloroethene	ug/L	ND	100	100	141	154	141	154	70-146	9	30	H1,M1
trans-1,3-Dichloropropene	ug/L	ND	100	100	121	133	121	133	70-135	9	30	H1
Trichloroethene	ug/L	ND	100	100	131	139	131	139	70-147	6	30	H1
Trichlorofluoromethane	ug/L	ND	100	100	114	129	114	129	70-148	13	30	H1
Vinyl acetate	ug/L	ND	200	200	322	367	161	184	49-151	13	30	H1,M1, v1
Vinyl chloride	ug/L	ND	100	100	136	147	136	147	70-156	8	30	H1
Xylene (Total)	ug/L	1100	300	300	1480	1520	128	141	63-158	3	30	
1,2-Dichloroethane-d4 (S)	%						111	113	70-130			
4-Bromofluorobenzene (S)	%						100	102	70-130			
Toluene-d8 (S)	%						100	103	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

QC Batch: 542729 Analysis Method: EPA 8260D Mod.
QC Batch Method: EPA 8260D Mod. Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92478024001, 92478024003, 92478024004, 92478024005, 92478024006, 92478024007, 92478024008, 92478024009, 92478024010, 92478024011, 92478024012, 92478024013, 92478024014, 92478024015

METHOD BLANK: 2891387 Matrix: Water
Associated Lab Samples: 92478024001, 92478024003, 92478024004, 92478024005, 92478024006, 92478024007, 92478024008, 92478024009, 92478024010, 92478024011, 92478024012, 92478024013, 92478024014, 92478024015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	05/20/20 17:52	
1,2-Dichloroethane-d4 (S)	%	98	50-150	05/20/20 17:52	
Toluene-d8 (S)	%	106	50-150	05/20/20 17:52	

LABORATORY CONTROL SAMPLE: 2891388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	19.3	97	70-130	
1,2-Dichloroethane-d4 (S)	%			106	50-150	
Toluene-d8 (S)	%			101	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2891389 2891390

Parameter	Units	92478023002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	99.8	20	20	120	127	99	134	50-150	6	30	E
1,2-Dichloroethane-d4 (S)	%						95	95	50-150		30	
Toluene-d8 (S)	%						99	115	50-150		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop-Flex offsite
Pace Project No.: 92478024

QC Batch: 542881
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92478024002

METHOD BLANK: 2892029 Matrix: Water
Associated Lab Samples: 92478024002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	05/21/20 12:13	
1,2-Dichloroethane-d4 (S)	%	94	50-150	05/21/20 12:13	
Toluene-d8 (S)	%	105	50-150	05/21/20 12:13	

LABORATORY CONTROL SAMPLE: 2892030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	19.4	97	70-130	
1,2-Dichloroethane-d4 (S)	%			92	50-150	
Toluene-d8 (S)	%			105	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2892586 2892587

Parameter	Units	92478032017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	ND	20	20	18.8	19.1	90	92	50-150	2	30	
1,2-Dichloroethane-d4 (S)	%						106	105	50-150		30	
Toluene-d8 (S)	%						111	110	50-150		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Kop-Flex offsite
Pace Project No.: 92478024

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Kop-Flex offsite
Pace Project No.: 92478024

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92478024001	**MW-24D**	EPA 8260D	543382		
92478024002	**MW-46D**	EPA 8260D	542931		
92478024003	**MW-29D**	EPA 8260D	543382		
92478024004	**MW-30D-273**	EPA 8260D	542931		
92478024005	**MW-30D-413**	EPA 8260D	542931		
92478024006	**MW-32D**	EPA 8260D	542931		
92478024007	**MW-33D-295**	EPA 8260D	542927		
92478024008	**MW-33D-235**	EPA 8260D	542931		
92478024009	**MW-35D**	EPA 8260D	542931		
92478024010	**MW-34D**	EPA 8260D	543382		
92478024011	**MW-28D**	EPA 8260D	542931		
92478024012	**MW-36D**	EPA 8260D	542931		
92478024013	**Dup051420**	EPA 8260D	542931		
92478024014	**MW-25D-130**	EPA 8260D	542931		
92478024015	**MW-25D-190**	EPA 8260D	542927		
92478024001	**MW-24D**	EPA 8260D Mod.	542729		
92478024002	**MW-46D**	EPA 8260D Mod.	542881		
92478024003	**MW-29D**	EPA 8260D Mod.	542729		
92478024004	**MW-30D-273**	EPA 8260D Mod.	542729		
92478024005	**MW-30D-413**	EPA 8260D Mod.	542729		
92478024006	**MW-32D**	EPA 8260D Mod.	542729		
92478024007	**MW-33D-295**	EPA 8260D Mod.	542729		
92478024008	**MW-33D-235**	EPA 8260D Mod.	542729		
92478024009	**MW-35D**	EPA 8260D Mod.	542729		
92478024010	**MW-34D**	EPA 8260D Mod.	542729		
92478024011	**MW-28D**	EPA 8260D Mod.	542729		
92478024012	**MW-36D**	EPA 8260D Mod.	542729		
92478024013	**Dup051420**	EPA 8260D Mod.	542729		
92478024014	**MW-25D-130**	EPA 8260D Mod.	542729		
92478024015	**MW-25D-190**	EPA 8260D Mod.	542729		

Pace Analytical®	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: WSP

Project #: WO# : 92478024

92478024

Courier: ☐ Commercial ☑ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: SK 5-18-20

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 92T061

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 5.8, 6.9, 10.7 **Correction Factor:** Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 5.9, 7.0, 10.8

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	10.
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present? SR 5-18-20	☑ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Ice melted

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # WO#: 92478024

PM: PTE Due Date: 05/26/20

CLIENT: 92-WSP

Pgi

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1	\				\	\	\	\			\		\	\	\	6									\	\			
2	\				\	\	\	\			\		\	\	\	6									\	\			
3	\				\	\	\	\			\		\	\	\	6									\	\			
4	\				\	\	\	\			\		\	\	\	6									\	\			
5	\				\	\	\	\			\		\	\	\	6									\	\			
6	\				\	\	\	\			\		\	\	\	6									\	\			
7	\				\	\	\	\			\		\	\	\	6									\	\			
8	\				\	\	\	\			\		\	\	\	6									\	\			
9	\				\	\	\	\			\		\	\	\	6									\	\			
10	\				\	\	\	\			\		\	\	\	6									\	\			
11	\				\	\	\	\			\		\	\	\	6									\	\			
12	\				\	\	\	\			\		\	\	\	6									\	\			

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # **WO#: 92478024**

PM: PTE Due Date: 05/26/20

CLIENT: 92-WSP

pg2

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																G													
2																G													
3																G													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

offsite

CHAIN-OF-CUSTODY RECORD

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

Project Name: Kopflex - offsite

Project Location: Hanover, MD

Project Number & Task: 31401545.011 / 1

WSP USA Contact Name: Eric Johnson

WSP USA Contact E-mail: Eric.Johnson@wsp.com

WSP USA Contact Phone: (703)-709-6500

Sampler(s) Name(s): Molly Long, Elliott Martynkiewicz

Sampler(s) Signature(s):

No. 010012

Laboratory Name & Location: Pace, Huntersville, NC

Laboratory Project Manager: Taylor Ezell

Requested Turn-Around-Time: [x] Standard [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] ___ HR

Requested Analyses & Preservatives

	Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	VOCs 8260B	1,4-Dioxane 8260B SIMS	Sample Comments
A	MW-24D	AQ	05/12/20	1555			6	X	X	001 - 92478024
B	MW-46D	AQ	05/12/20	1745			6	X	X	002
C	MW-29D	AQ	5/14/20	1330			6	X	X	003
C	MW-30D-273	AQ	5/14/20	1345			6	X	X	004
C	MW-30D-413	AQ	5/14/20	1355			6	X	X	005
A	MW-32D	AQ	5/14/20	1420			6	X	X	006
B	MW-33D-295	AQ	5/14/20	1505			6	X	X	007
A	MW-33D-235	AQ	5/14/20	1515			6	X	X	008
A	MW-35D	AQ	5/14/20	1555			6	X	X	009
B	MW-34D	AQ	5/14/20	1605			6	X	X	010
B	MW-28D	AQ	5/14/20	1630			6	X	X	011
C	MW-36D	AQ	5/14/20	1645			6	X	X	012
C	DUP05142O	AQ	5/14/20	0900			6	X	X	013
B	MW-25D-130	AQ	5/14/20	1705			6	X	X	014
A	MW-25D-190	AQ	5/14/20	1710			6	X	X	015

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	1600 5/14/20		Fedex				
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
			Stoper Pace	5-18-20	912		

*Use stop time/date 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)

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 10, 2020

Eric Johnson
WSP USA
13530 Dulles Technology Drive
Suite 300
Herndon, VA 20171

RE: Project: KOP-Flex
Pace Project No.: 92480486

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on June 03, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Molly Long, WSP
Pam Robertson, WSP USA

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: KOP-Flex
Pace Project No.: 92480486

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: KOP-Flex
Pace Project No.: 92480486

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92480486001	**MW-31D**	Water	06/02/20 16:15	06/03/20 16:47

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: KOP-Flex
Pace Project No.: 92480486

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92480486001	**MW-31D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C

PASI-C = Pace Analytical Services - Charlotte

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: KOP-Flex
Pace Project No.: 92480486

Sample: MW-31D **Lab ID: 92480486001** Collected: 06/02/20 16:15 Received: 06/03/20 16:47 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		06/09/20 00:15	67-64-1	
Benzene	ND	ug/L	1.0	1		06/09/20 00:15	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		06/09/20 00:15	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		06/09/20 00:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		06/09/20 00:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		06/09/20 00:15	75-25-2	IK
Bromomethane	ND	ug/L	2.0	1		06/09/20 00:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		06/09/20 00:15	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		06/09/20 00:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/09/20 00:15	75-00-3	
Chloroform	ND	ug/L	5.0	1		06/09/20 00:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/09/20 00:15	74-87-3	v2
2-Chlorotoluene	ND	ug/L	1.0	1		06/09/20 00:15	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		06/09/20 00:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		06/09/20 00:15	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		06/09/20 00:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/09/20 00:15	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		06/09/20 00:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		06/09/20 00:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/09/20 00:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/09/20 00:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/09/20 00:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/20 00:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/20 00:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/09/20 00:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		06/09/20 00:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		06/09/20 00:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		06/09/20 00:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		06/09/20 00:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/09/20 00:15	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		06/09/20 00:15	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		06/09/20 00:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		06/09/20 00:15	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		06/09/20 00:15	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		06/09/20 00:15	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		06/09/20 00:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		06/09/20 00:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		06/09/20 00:15	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		06/09/20 00:15	91-20-3	
Styrene	ND	ug/L	1.0	1		06/09/20 00:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/20 00:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/20 00:15	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: KOP-Flex
Pace Project No.: 92480486

Sample: MW-31D **Lab ID: 92480486001** Collected: 06/02/20 16:15 Received: 06/03/20 16:47 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		06/09/20 00:15	127-18-4	
Toluene	ND	ug/L	1.0	1		06/09/20 00:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/09/20 00:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/09/20 00:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/09/20 00:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/09/20 00:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		06/09/20 00:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/09/20 00:15	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		06/09/20 00:15	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		06/09/20 00:15	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		06/09/20 00:15	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/09/20 00:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/09/20 00:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		06/09/20 00:15	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		06/09/20 00:15	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		06/09/20 00:15	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		06/09/20 02:33	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	50-150	1		06/09/20 02:33	17060-07-0	
Toluene-d8 (S)	89	%	50-150	1		06/09/20 02:33	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

QC Batch: 545838
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92480486001

METHOD BLANK: 2906078 Matrix: Water
Associated Lab Samples: 92480486001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,1,1-Trichloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,1,2-Trichloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,1-Dichloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,1-Dichloroethene	ug/L	ND	1.0	06/08/20 23:58	
1,1-Dichloropropene	ug/L	ND	1.0	06/08/20 23:58	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
1,2,3-Trichloropropane	ug/L	ND	1.0	06/08/20 23:58	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	06/08/20 23:58	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	06/08/20 23:58	
1,2-Dichlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
1,2-Dichloroethane	ug/L	ND	1.0	06/08/20 23:58	
1,2-Dichloropropane	ug/L	ND	1.0	06/08/20 23:58	
1,3-Dichlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
1,3-Dichloropropane	ug/L	ND	1.0	06/08/20 23:58	
1,4-Dichlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
2,2-Dichloropropane	ug/L	ND	1.0	06/08/20 23:58	
2-Butanone (MEK)	ug/L	ND	5.0	06/08/20 23:58	
2-Chlorotoluene	ug/L	ND	1.0	06/08/20 23:58	
2-Hexanone	ug/L	ND	5.0	06/08/20 23:58	
4-Chlorotoluene	ug/L	ND	1.0	06/08/20 23:58	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	06/08/20 23:58	
Acetone	ug/L	ND	25.0	06/08/20 23:58	
Benzene	ug/L	ND	1.0	06/08/20 23:58	
Bromobenzene	ug/L	ND	1.0	06/08/20 23:58	
Bromochloromethane	ug/L	ND	1.0	06/08/20 23:58	
Bromodichloromethane	ug/L	ND	1.0	06/08/20 23:58	
Bromoform	ug/L	ND	1.0	06/08/20 23:58	IK
Bromomethane	ug/L	ND	2.0	06/08/20 23:58	
Carbon tetrachloride	ug/L	ND	1.0	06/08/20 23:58	
Chlorobenzene	ug/L	ND	1.0	06/08/20 23:58	
Chloroethane	ug/L	ND	1.0	06/08/20 23:58	
Chloroform	ug/L	ND	5.0	06/08/20 23:58	
Chloromethane	ug/L	ND	1.0	06/08/20 23:58	v2
cis-1,2-Dichloroethene	ug/L	ND	1.0	06/08/20 23:58	
cis-1,3-Dichloropropene	ug/L	ND	1.0	06/08/20 23:58	
Dibromochloromethane	ug/L	ND	1.0	06/08/20 23:58	
Dibromomethane	ug/L	ND	1.0	06/08/20 23:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

METHOD BLANK: 2906078 Matrix: Water
Associated Lab Samples: 92480486001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	06/08/20 23:58	
Diisopropyl ether	ug/L	ND	1.0	06/08/20 23:58	
Ethylbenzene	ug/L	ND	1.0	06/08/20 23:58	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	06/08/20 23:58	
m&p-Xylene	ug/L	ND	2.0	06/08/20 23:58	
Methyl-tert-butyl ether	ug/L	ND	1.0	06/08/20 23:58	
Methylene Chloride	ug/L	ND	5.0	06/08/20 23:58	
Naphthalene	ug/L	ND	1.0	06/08/20 23:58	
o-Xylene	ug/L	ND	1.0	06/08/20 23:58	
p-Isopropyltoluene	ug/L	ND	1.0	06/08/20 23:58	
Styrene	ug/L	ND	1.0	06/08/20 23:58	
Tetrachloroethene	ug/L	ND	1.0	06/08/20 23:58	
Toluene	ug/L	ND	1.0	06/08/20 23:58	
trans-1,2-Dichloroethene	ug/L	ND	1.0	06/08/20 23:58	
trans-1,3-Dichloropropene	ug/L	ND	1.0	06/08/20 23:58	
Trichloroethene	ug/L	ND	1.0	06/08/20 23:58	
Trichlorofluoromethane	ug/L	ND	1.0	06/08/20 23:58	
Vinyl acetate	ug/L	ND	2.0	06/08/20 23:58	
Vinyl chloride	ug/L	ND	1.0	06/08/20 23:58	
Xylene (Total)	ug/L	ND	1.0	06/08/20 23:58	
1,2-Dichloroethane-d4 (S)	%	96	70-130	06/08/20 23:58	
4-Bromofluorobenzene (S)	%	104	70-130	06/08/20 23:58	
Toluene-d8 (S)	%	103	70-130	06/08/20 23:58	

LABORATORY CONTROL SAMPLE: 2906079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.5	105	70-130	
1,1,1-Trichloroethane	ug/L	50	51.0	102	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.6	93	70-130	
1,1,2-Trichloroethane	ug/L	50	51.0	102	70-130	
1,1-Dichloroethane	ug/L	50	48.0	96	70-130	
1,1-Dichloroethene	ug/L	50	47.8	96	70-130	
1,1-Dichloropropene	ug/L	50	51.4	103	70-130	
1,2,3-Trichlorobenzene	ug/L	50	49.0	98	70-130	
1,2,3-Trichloropropane	ug/L	50	48.8	98	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.9	108	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.9	104	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	48.7	97	70-130	
1,2-Dichlorobenzene	ug/L	50	49.5	99	70-130	
1,2-Dichloroethane	ug/L	50	46.3	93	70-130	
1,2-Dichloropropane	ug/L	50	47.6	95	70-130	
1,3-Dichlorobenzene	ug/L	50	46.6	93	70-130	
1,3-Dichloropropane	ug/L	50	48.1	96	70-131	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

LABORATORY CONTROL SAMPLE: 2906079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	47.7	95	70-130	
2,2-Dichloropropane	ug/L	50	45.5	91	69-130	
2-Butanone (MEK)	ug/L	100	91.9	92	64-135	
2-Chlorotoluene	ug/L	50	48.2	96	70-130	
2-Hexanone	ug/L	100	94.0	94	66-135	
4-Chlorotoluene	ug/L	50	46.3	93	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.5	88	70-130	
Acetone	ug/L	100	90.6	91	61-157	
Benzene	ug/L	50	48.3	97	70-130	
Bromobenzene	ug/L	50	48.3	97	70-130	
Bromochloromethane	ug/L	50	46.5	93	70-130	
Bromodichloromethane	ug/L	50	50.3	101	70-130	
Bromoform	ug/L	50	47.4	95	70-130	IK
Bromomethane	ug/L	50	44.4	89	38-130	
Carbon tetrachloride	ug/L	50	53.6	107	70-130	
Chlorobenzene	ug/L	50	46.3	93	70-130	
Chloroethane	ug/L	50	40.6	81	37-142	
Chloroform	ug/L	50	52.4	105	70-130	
Chloromethane	ug/L	50	29.5	59	48-130	v3
cis-1,2-Dichloroethene	ug/L	50	46.2	92	70-130	
cis-1,3-Dichloropropene	ug/L	50	51.7	103	70-130	
Dibromochloromethane	ug/L	50	50.0	100	70-130	
Dibromomethane	ug/L	50	53.8	108	70-130	
Dichlorodifluoromethane	ug/L	50	42.8	86	53-134	
Diisopropyl ether	ug/L	50	41.6	83	70-135	
Ethylbenzene	ug/L	50	46.4	93	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.3	101	68-132	
m&p-Xylene	ug/L	100	92.7	93	70-130	
Methyl-tert-butyl ether	ug/L	50	51.6	103	70-130	
Methylene Chloride	ug/L	50	40.9	82	67-132	
Naphthalene	ug/L	50	47.3	95	70-130	
o-Xylene	ug/L	50	46.1	92	70-131	
p-Isopropyltoluene	ug/L	50	47.2	94	70-130	
Styrene	ug/L	50	47.4	95	70-130	
Tetrachloroethene	ug/L	50	46.2	92	69-130	
Toluene	ug/L	50	47.1	94	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.4	95	70-130	
trans-1,3-Dichloropropene	ug/L	50	49.0	98	70-130	
Trichloroethene	ug/L	50	51.1	102	70-130	
Trichlorofluoromethane	ug/L	50	42.3	85	63-130	
Vinyl acetate	ug/L	100	88.4	88	55-143	
Vinyl chloride	ug/L	50	45.5	91	70-131	
Xylene (Total)	ug/L	150	139	93	70-130	
1,2-Dichloroethane-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			101	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2906080 2906081

Parameter	Units	92480286016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.3	20.2	102	101	73-134	1	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	22.7	22.9	113	114	82-143	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.2	18.7	96	94	70-136	3	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	21.3	20.6	105	102	70-135	3	30	
1,1-Dichloroethane	ug/L	163	20	20	173	172	50	45	70-139	1	30	M1
1,1-Dichloroethene	ug/L	31.1	20	20	51.6	49.7	102	93	70-154	4	30	
1,1-Dichloropropene	ug/L	ND	20	20	22.6	22.4	113	112	70-149	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	18.9	19.5	94	98	70-135	4	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	21.0	20.0	105	100	71-137	5	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	22.0	20.7	110	103	73-140	6	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	20.5	20.3	102	102	65-134	1	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.5	18.5	97	93	70-137	5	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	19.5	19.6	98	98	70-133	1	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.3	20.2	99	98	70-137	1	30	
1,2-Dichloropropane	ug/L	ND	20	20	20.5	19.9	103	99	70-140	3	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.0	19.5	100	98	70-135	3	30	
1,3-Dichloropropane	ug/L	ND	20	20	19.8	18.0	99	90	70-143	9	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.7	18.5	99	92	70-133	7	30	
2,2-Dichloropropane	ug/L	ND	20	20	20.2	18.7	101	94	61-148	7	30	
2-Butanone (MEK)	ug/L	ND	40	40	41.6	39.9	104	100	60-139	4	30	
2-Chlorotoluene	ug/L	ND	20	20	21.0	20.6	105	103	70-144	2	30	
2-Hexanone	ug/L	ND	40	40	40.0	38.4	100	96	65-138	4	30	
4-Chlorotoluene	ug/L	ND	20	20	20.3	19.4	101	97	70-137	5	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	37.5	37.1	94	93	65-135	1	30	
Acetone	ug/L	ND	40	40	42.4	38.7	106	97	60-148	9	30	
Benzene	ug/L	ND	20	20	21.9	21.0	107	103	70-151	4	30	
Bromobenzene	ug/L	ND	20	20	21.2	20.6	106	103	70-136	3	30	
Bromochloromethane	ug/L	ND	20	20	18.5	19.4	93	97	70-141	5	30	
Bromodichloromethane	ug/L	ND	20	20	21.7	20.8	109	104	70-138	4	30	
Bromoform	ug/L	ND	20	20	17.2	17.6	86	88	63-130	2	30	IK
Bromomethane	ug/L	ND	20	20	12.5	12.9	62	64	15-152	3	30	v3
Carbon tetrachloride	ug/L	ND	20	20	24.9	23.9	125	119	70-143	4	30	
Chlorobenzene	ug/L	ND	20	20	20.2	20.0	101	100	70-138	1	30	
Chloroethane	ug/L	ND	20	20	20.0	18.9	100	95	52-163	5	30	
Chloroform	ug/L	ND	20	20	21.6	21.6	108	108	70-139	0	30	
Chloromethane	ug/L	ND	20	20	12.0	12.7	60	63	41-139	5	30	v3
cis-1,2-Dichloroethene	ug/L	58.6	20	20	75.4	73.6	84	75	70-141	2	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	22.5	21.2	112	106	70-137	6	30	
Dibromochloromethane	ug/L	ND	20	20	21.4	19.9	107	100	70-134	7	30	
Dibromomethane	ug/L	ND	20	20	23.7	22.1	119	110	70-138	7	30	
Dichlorodifluoromethane	ug/L	ND	20	20	17.9	16.4	89	82	47-155	9	30	
Diisopropyl ether	ug/L	ND	20	20	18.0	17.5	90	88	63-144	2	30	
Ethylbenzene	ug/L	ND	20	20	20.6	20.1	103	101	66-153	2	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	19.5	20.3	97	101	65-149	4	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2906080 2906081

Parameter	Units	92480286016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	ND	40	40	41.0	40.1	103	100	69-152	2	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.5	19.6	103	98	54-156	5	30	
Methylene Chloride	ug/L	ND	20	20	18.4	17.8	92	89	42-159	3	30	
Naphthalene	ug/L	ND	20	20	18.2	17.6	91	88	61-148	3	30	
o-Xylene	ug/L	ND	20	20	20.5	20.9	103	105	70-148	2	30	
p-Isopropyltoluene	ug/L	ND	20	20	19.9	18.6	99	93	70-146	7	30	
Styrene	ug/L	ND	20	20	21.0	20.2	105	101	70-135	4	30	
Tetrachloroethene	ug/L	ND	20	20	20.9	21.3	105	106	59-143	2	30	
Toluene	ug/L	ND	20	20	20.5	20.0	102	100	59-148	3	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.3	20.0	102	100	70-146	2	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.5	20.2	103	101	70-135	2	30	
Trichloroethene	ug/L	10.3	20	20	32.8	32.8	112	112	70-147	0	30	
Trichlorofluoromethane	ug/L	ND	20	20	18.7	18.8	93	94	70-148	1	30	
Vinyl acetate	ug/L	ND	40	40	33.2	32.3	83	81	49-151	3	30	
Vinyl chloride	ug/L	1.4	20	20	19.8	19.3	92	89	70-156	2	30	
Xylene (Total)	ug/L	ND	60	60	61.6	61.0	103	102	63-158	1	30	
1,2-Dichloroethane-d4 (S)	%						95	93	70-130			
4-Bromofluorobenzene (S)	%						101	100	70-130			
Toluene-d8 (S)	%						100	97	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: KOP-Flex
Pace Project No.: 92480486

QC Batch: 545927
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92480486001

METHOD BLANK: 2906496 Matrix: Water
Associated Lab Samples: 92480486001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	06/08/20 21:31	
1,2-Dichloroethane-d4 (S)	%	95	50-150	06/08/20 21:31	
Toluene-d8 (S)	%	93	50-150	06/08/20 21:31	

LABORATORY CONTROL SAMPLE: 2906497

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	18.2	91	70-130	
1,2-Dichloroethane-d4 (S)	%			93	50-150	
Toluene-d8 (S)	%			92	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2906498 2906499

Parameter	Units	92480286016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	10.4	20	20	29.5	28.5	96	90	50-150	4	30	
1,2-Dichloroethane-d4 (S)	%						98	97	50-150		30	
Toluene-d8 (S)	%						97	97	50-150		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: KOP-Flex
Pace Project No.: 92480486

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

IK	The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KOP-Flex
Pace Project No.: 92480486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92480486001	**MW-31D**	EPA 8260D	545838		
92480486001	**MW-31D**	EPA 8260D Mod.	545927		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: WSP

Project #: WO# : 92480486

92480486

Courier: ☐ Commercial ☐ Fed Ex ☒ Pace ☐ UPS ☐ USPS ☐ Other:____ ☑ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: EF 6/4/20

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 92T061

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 5.1 **Correction Factor:** Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 5.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☐ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☑ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # **WO# : 92480486**

PM: PTE Due Date: 06/10/20

CLIENT: 92-WSP

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1	\				\	\	\	\			\		\	\	\	6									\	\			
2	\				\	\	\	\			\		\	\	\										\	\			
3	\				\	\	\	\			\		\	\	\										\	\			
4	\				\	\	\	\			\		\	\	\										\	\			
5	\				\	\	\	\			\		\	\	\										\	\			
6	\				\	\	\	\			\		\	\	\										\	\			
7	\				\	\	\	\			\		\	\	\										\	\			
8	\				\	\	\	\			\		\	\	\										\	\			
9	\				\	\	\	\			\		\	\	\										\	\			
10	\				\	\	\	\			\		\	\	\										\	\			
11	\				\	\	\	\			\		\	\	\										\	\			
12	\				\	\	\	\			\		\	\	\										\	\			

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY RECORD

No. 003680 — WSP | PARSONS BRINCKERHOFF

WSP | Parsons Brinckerhoff Office Address	13530 Dulles Technology Dr. Suite 300 Herndon, VA 20171
Project Name	Kop-Flex
WSP | Parsons Brinckerhoff Contact Name	Eric Johnson
Project Location	Hanover, MD
WSP | Parsons Brinckerhoff Contact E-mail	Eric.Johnson@wspgroup.com
Project Number & Task	31401545.011101
WSP | Parsons Brinckerhoff Contact Phone	703-709-6500
Sampler(s) Name(s)	Chris Crosa
Sampler(s) Signature(s)	
Laboratory Name & Location	Pace Analytical
Laboratory Project Manager	Taylor Ezell
Requested Turn-Around-Time	[X] Standard [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] ___ HR
	92480486

Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	Requested Analyses & Preservatives: VOCs 8260B	1,4-Dioxane 8260SIM	Sample Comments
MW-31D	GW	6/2/20		1615		6	X	X	001

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	6/3/20	1647	ZZ Pace	6/3/20	1647		
Relinquished By (Signature)	**Date**	**Time**	**Received By (Signature)**	**Date**	**Time**	**Number of Packages**	**Custody Seal Number(s)**

*Use stop time/date 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)

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 03, 2020

Eric Johnson
WSP USA
13530 Dulles Technology Drive
Suite 300
Herndon, VA 20171

RE: Project: Kop Flex
Pace Project No.: 92507939

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory between November 24, 2020 and November 25, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Molly Long, WSP
Pam Robertson, WSP USA

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Kop Flex
Pace Project No.: 92507939

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Kop Flex
Pace Project No.: 92507939

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92507939001	**DUP-112320**	Water	11/23/20 12:00	11/24/20 11:00
92507939002	**MW-24D**	Water	11/23/20 09:45	11/24/20 11:00
92507939003	**MW-35D**	Water	11/23/20 10:25	11/24/20 11:00
92507939004	**MW-34D**	Water	11/23/20 10:45	11/24/20 11:00
92507939005	**MW-29D**	Water	11/23/20 11:25	11/24/20 11:00
92507939006	**MW-30D-273**	Water	11/23/20 11:50	11/24/20 11:00
92507939007	**MW-30D-413**	Water	11/23/20 12:00	11/24/20 11:00
92507939008	**MW-33D-295**	Water	11/23/20 12:20	11/24/20 11:00
92507939009	**MW-33D-235**	Water	11/23/20 12:25	11/24/20 11:00
92507939010	**MW-32D**	Water	11/23/20 14:15	11/24/20 11:00
92507939011	**MW-28D**	Water	11/23/20 14:35	11/24/20 11:00
92507939012	**MW-25D-130**	Water	11/23/20 15:00	11/24/20 11:00
92507939013	**MW-25D-190 MS/MSD**	Water	11/23/20 16:00	11/24/20 11:00
92507939014	**MW-31D**	Water	11/23/20 12:55	11/25/20 11:42
92507939015	**MW-36D**	Water	11/23/20 14:55	11/25/20 11:42
92507939016	**MW-46D**	Water	11/23/20 16:40	11/25/20 11:42
92507939017	**TRIP BLANK**	Water	11/23/20 16:40	11/25/20 11:42

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Kop Flex
Pace Project No.: 92507939

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92507939001	DUP-112320	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939002	MW-24D	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939003	MW-35D	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939004	MW-34D	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939005	MW-29D	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939006	MW-30D-273	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939007	MW-30D-413	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939008	MW-33D-295	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939009	MW-33D-235	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507939010	MW-32D	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939011	MW-28D	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939012	MW-25D-130	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939013	MW-25D-190 MS/MSD	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507939014	MW-31D	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507939015	MW-36D	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507939016	MW-46D	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507939017	TRIP BLANK	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C

PASI-C = Pace Analytical Services - Charlotte

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: DUP-112320 **Lab ID: 92507939001** Collected: 11/23/20 12:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 17:12	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 17:12	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 17:12	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 17:12	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 17:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 17:12	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 17:12	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 17:12	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 17:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 17:12	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 17:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 17:12	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:12	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 17:12	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 17:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 17:12	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 17:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 17:12	75-71-8	
1,1-Dichloroethane	**3.0**	ug/L	1.0	1		11/25/20 17:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 17:12	107-06-2	
1,1-Dichloroethene	**60.7**	ug/L	1.0	1		11/25/20 17:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:12	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:12	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:12	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 17:12	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 17:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 17:12	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 17:12	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 17:12	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 17:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 17:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 17:12	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 17:12	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 17:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:12	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: DUP-112320 **Lab ID: 92507939001** Collected: 11/23/20 12:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 17:12	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 17:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 17:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 17:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 17:12	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 17:12	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 17:12	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 17:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 17:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 17:12	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 17:12	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/25/20 17:12	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/25/20 17:12	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**33.2**	ug/L	2.0	1		11/24/20 21:12	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/24/20 21:12	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 21:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-24D **Lab ID: 92507939002** Collected: 11/23/20 09:45 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	100	4		12/01/20 21:15	67-64-1	
Benzene	ND	ug/L	4.0	4		12/01/20 21:15	71-43-2	
Bromobenzene	ND	ug/L	4.0	4		12/01/20 21:15	108-86-1	
Bromochloromethane	ND	ug/L	4.0	4		12/01/20 21:15	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	4		12/01/20 21:15	75-27-4	
Bromoform	ND	ug/L	4.0	4		12/01/20 21:15	75-25-2	
Bromomethane	ND	ug/L	8.0	4		12/01/20 21:15	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	20.0	4		12/01/20 21:15	78-93-3	
Carbon tetrachloride	ND	ug/L	4.0	4		12/01/20 21:15	56-23-5	
Chlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	108-90-7	
Chloroethane	ND	ug/L	4.0	4		12/01/20 21:15	75-00-3	
Chloroform	ND	ug/L	20.0	4		12/01/20 21:15	67-66-3	
Chloromethane	ND	ug/L	4.0	4		12/01/20 21:15	74-87-3	
2-Chlorotoluene	ND	ug/L	4.0	4		12/01/20 21:15	95-49-8	
4-Chlorotoluene	ND	ug/L	4.0	4		12/01/20 21:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	20.0	4		12/01/20 21:15	96-12-8	
Dibromochloromethane	ND	ug/L	4.0	4		12/01/20 21:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	4.0	4		12/01/20 21:15	106-93-4	
Dibromomethane	ND	ug/L	4.0	4		12/01/20 21:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	4.0	4		12/01/20 21:15	75-71-8	
1,1-Dichloroethane	**73.5**	ug/L	4.0	4		12/01/20 21:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	4.0	4		12/01/20 21:15	107-06-2	
1,1-Dichloroethene	**505**	ug/L	4.0	4		12/01/20 21:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	4.0	4		12/01/20 21:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	4.0	4		12/01/20 21:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	4.0	4		12/01/20 21:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	4.0	4		12/01/20 21:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	4.0	4		12/01/20 21:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	4.0	4		12/01/20 21:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	4		12/01/20 21:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	4		12/01/20 21:15	10061-02-6	
Diisopropyl ether	ND	ug/L	4.0	4		12/01/20 21:15	108-20-3	
Ethylbenzene	ND	ug/L	4.0	4		12/01/20 21:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	4		12/01/20 21:15	87-68-3	
2-Hexanone	ND	ug/L	20.0	4		12/01/20 21:15	591-78-6	
p-Isopropyltoluene	ND	ug/L	4.0	4		12/01/20 21:15	99-87-6	
Methylene Chloride	ND	ug/L	20.0	4		12/01/20 21:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	20.0	4		12/01/20 21:15	108-10-1	v2
Methyl-tert-butyl ether	ND	ug/L	4.0	4		12/01/20 21:15	1634-04-4	
Naphthalene	ND	ug/L	4.0	4		12/01/20 21:15	91-20-3	
Styrene	ND	ug/L	4.0	4		12/01/20 21:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	4.0	4		12/01/20 21:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	4.0	4		12/01/20 21:15	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-24D **Lab ID: 92507939002** Collected: 11/23/20 09:45 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	4.0	4		12/01/20 21:15	127-18-4	
Toluene	ND	ug/L	4.0	4		12/01/20 21:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	4.0	4		12/01/20 21:15	120-82-1	
1,1,1-Trichloroethane	**4.4**	ug/L	4.0	4		12/01/20 21:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	4		12/01/20 21:15	79-00-5	
Trichloroethene	ND	ug/L	4.0	4		12/01/20 21:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	4		12/01/20 21:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	4.0	4		12/01/20 21:15	96-18-4	
Vinyl acetate	ND	ug/L	8.0	4		12/01/20 21:15	108-05-4	
Vinyl chloride	ND	ug/L	4.0	4		12/01/20 21:15	75-01-4	
Xylene (Total)	ND	ug/L	4.0	4		12/01/20 21:15	1330-20-7	
m&p-Xylene	ND	ug/L	8.0	4		12/01/20 21:15	179601-23-1	
o-Xylene	ND	ug/L	4.0	4		12/01/20 21:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	4		12/01/20 21:15	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	4		12/01/20 21:15	17060-07-0	
Toluene-d8 (S)	106	%	70-130	4		12/01/20 21:15	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**208**	ug/L	5.0	2.5		11/25/20 07:49	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	70-130	2.5		11/25/20 07:49	17060-07-0	
Toluene-d8 (S)	95	%	66-133	2.5		11/25/20 07:49	2037-26-5	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-35D **Lab ID: 92507939003** Collected: 11/23/20 10:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 15:43	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 15:43	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 15:43	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 15:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 15:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 15:43	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 15:43	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 15:43	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 15:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 15:43	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 15:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 15:43	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 15:43	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 15:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 15:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 15:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 15:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 15:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 15:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 15:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 15:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:43	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 15:43	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 15:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 15:43	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 15:43	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 15:43	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 15:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 15:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 15:43	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 15:43	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 15:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 15:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 15:43	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-35D **Lab ID: 92507939003** Collected: 11/23/20 10:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 15:43	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 15:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 15:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 15:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 15:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 15:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 15:43	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 15:43	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 15:43	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 15:43	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 15:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 15:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 15:43	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		11/25/20 15:43	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/25/20 15:43	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/24/20 21:31	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/24/20 21:31	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 21:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-34D **Lab ID: 92507939004** Collected: 11/23/20 10:45 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 16:01	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 16:01	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 16:01	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 16:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 16:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 16:01	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 16:01	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 16:01	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 16:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 16:01	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 16:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 16:01	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:01	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:01	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 16:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 16:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 16:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 16:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 16:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:01	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:01	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 16:01	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 16:01	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 16:01	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 16:01	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 16:01	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 16:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 16:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 16:01	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 16:01	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 16:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:01	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-34D **Lab ID: 92507939004** Collected: 11/23/20 10:45 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 16:01	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 16:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:01	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 16:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 16:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 16:01	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 16:01	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 16:01	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 16:01	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 16:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 16:01	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 16:01	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		11/25/20 16:01	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		11/25/20 16:01	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/24/20 21:50	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		11/24/20 21:50	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 21:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-29D **Lab ID: 92507939005** Collected: 11/23/20 11:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 16:19	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 16:19	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 16:19	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 16:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 16:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 16:19	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 16:19	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 16:19	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 16:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 16:19	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 16:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 16:19	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:19	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:19	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 16:19	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 16:19	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 16:19	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 16:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 16:19	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:19	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:19	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:19	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:19	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:19	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 16:19	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 16:19	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 16:19	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 16:19	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 16:19	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 16:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 16:19	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 16:19	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 16:19	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 16:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:19	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-29D **Lab ID: 92507939005** Collected: 11/23/20 11:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 16:19	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 16:19	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:19	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 16:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 16:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 16:19	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 16:19	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 16:19	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 16:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 16:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 16:19	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 16:19	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/25/20 16:19	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/25/20 16:19	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/24/20 22:09	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		11/24/20 22:09	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 22:09	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-30D-273 **Lab ID: 92507939006** Collected: 11/23/20 11:50 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 18:41	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 18:41	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 18:41	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 18:41	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 18:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 18:41	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 18:41	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 18:41	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 18:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 18:41	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 18:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 18:41	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:41	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 18:41	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 18:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 18:41	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 18:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 18:41	75-71-8	
1,1-Dichloroethane	**1.0**	ug/L	1.0	1		11/25/20 18:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 18:41	107-06-2	
1,1-Dichloroethene	**39.5**	ug/L	1.0	1		11/25/20 18:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:41	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:41	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:41	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:41	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 18:41	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 18:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 18:41	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 18:41	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 18:41	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 18:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 18:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 18:41	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 18:41	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 18:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:41	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-30D-273 **Lab ID: 92507939006** Collected: 11/23/20 11:50 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 18:41	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 18:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 18:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 18:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 18:41	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 18:41	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 18:41	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 18:41	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 18:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 18:41	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 18:41	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 18:41	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/25/20 18:41	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**19.5**	ug/L	2.0	1		11/24/20 22:28	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/24/20 22:28	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/24/20 22:28	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-30D-413 **Lab ID: 92507939007** Collected: 11/23/20 12:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/25/20 16:54	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 16:54	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 16:54	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 16:54	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 16:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 16:54	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 16:54	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 16:54	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 16:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 16:54	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 16:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 16:54	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:54	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 16:54	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 16:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 16:54	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 16:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 16:54	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:54	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 16:54	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 16:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 16:54	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 16:54	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 16:54	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 16:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 16:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 16:54	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 16:54	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 16:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:54	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-30D-413 **Lab ID: 92507939007** Collected: 11/23/20 12:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/25/20 16:54	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 16:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 16:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 16:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 16:54	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 16:54	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 16:54	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 16:54	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 16:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 16:54	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 16:54	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 16:54	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/25/20 16:54	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/24/20 22:48	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/24/20 22:48	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/24/20 22:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-33D-295 **Lab ID: 92507939008** Collected: 11/23/20 12:20 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		12/01/20 16:50	67-64-1	
Benzene	ND	ug/L	1.0	1		12/01/20 16:50	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/01/20 16:50	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/01/20 16:50	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/01/20 16:50	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/01/20 16:50	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/01/20 16:50	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		12/01/20 16:50	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/01/20 16:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/01/20 16:50	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/01/20 16:50	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/01/20 16:50	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/01/20 16:50	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/01/20 16:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/01/20 16:50	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/01/20 16:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/01/20 16:50	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/01/20 16:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/01/20 16:50	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/01/20 16:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/01/20 16:50	107-06-2	
1,1-Dichloroethene	**3.6**	ug/L	1.0	1		12/01/20 16:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/01/20 16:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/01/20 16:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/01/20 16:50	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/01/20 16:50	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/01/20 16:50	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/01/20 16:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/01/20 16:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/01/20 16:50	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/01/20 16:50	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/01/20 16:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/01/20 16:50	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/01/20 16:50	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/01/20 16:50	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/01/20 16:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/01/20 16:50	108-10-1	v2
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/01/20 16:50	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/01/20 16:50	91-20-3	
Styrene	ND	ug/L	1.0	1		12/01/20 16:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/01/20 16:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/01/20 16:50	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-33D-295 **Lab ID: 92507939008** Collected: 11/23/20 12:20 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		12/01/20 16:50	127-18-4	
Toluene	ND	ug/L	1.0	1		12/01/20 16:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/01/20 16:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/01/20 16:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/01/20 16:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/01/20 16:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/01/20 16:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/01/20 16:50	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/01/20 16:50	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/01/20 16:50	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/01/20 16:50	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/01/20 16:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/01/20 16:50	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/01/20 16:50	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		12/01/20 16:50	17060-07-0	
Toluene-d8 (S)	105	%	70-130	1		12/01/20 16:50	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**6.0**	ug/L	2.0	1		11/25/20 01:03	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		11/25/20 01:03	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/25/20 01:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-33D-235 **Lab ID: 92507939009** Collected: 11/23/20 12:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 01:18	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 01:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 01:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 01:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 01:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 01:18	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 01:18	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 01:18	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 01:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 01:18	75-00-3	IK,v3
Chloroform	ND	ug/L	5.0	1		11/26/20 01:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 01:18	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 01:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 01:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 01:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 01:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 01:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:18	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 01:18	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 01:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 01:18	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 01:18	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 01:18	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 01:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 01:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 01:18	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 01:18	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 01:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:18	79-34-5	M1,R1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-33D-235 **Lab ID: 92507939009** Collected: 11/23/20 12:25 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 01:18	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 01:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 01:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 01:18	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 01:18	96-18-4	R1
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 01:18	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 01:18	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 01:18	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 01:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 01:18	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/20 01:18	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	70-130	1		11/26/20 01:18	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 01:18	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/25/20 18:36	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%	70-130	1		11/25/20 18:36	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/25/20 18:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-32D **Lab ID: 92507939010** Collected: 11/23/20 14:15 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 02:31	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 02:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 02:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 02:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 02:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 02:31	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 02:31	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 02:31	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 02:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 02:31	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 02:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 02:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 02:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 02:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 02:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 02:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 02:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:31	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 02:31	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 02:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 02:31	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 02:31	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 02:31	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 02:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 02:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 02:31	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 02:31	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 02:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:31	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-32D **Lab ID: 92507939010** Collected: 11/23/20 14:15 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 02:31	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 02:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 02:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 02:31	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 02:31	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 02:31	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 02:31	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 02:31	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 02:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 02:31	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		11/26/20 02:31	460-00-4	
1,2-Dichloroethane-d4 (S)	123	%	70-130	1		11/26/20 02:31	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/26/20 02:31	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/24/20 23:07	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		11/24/20 23:07	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/24/20 23:07	2037-26-5	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-28D **Lab ID: 92507939011** Collected: 11/23/20 14:35 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 02:13	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 02:13	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 02:13	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 02:13	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 02:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 02:13	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 02:13	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 02:13	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 02:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 02:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 02:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 02:13	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:13	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:13	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 02:13	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 02:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 02:13	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 02:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 02:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:13	107-06-2	
1,1-Dichloroethene	**7.6**	ug/L	1.0	1		11/26/20 02:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:13	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 02:13	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 02:13	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 02:13	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 02:13	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 02:13	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 02:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 02:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 02:13	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 02:13	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 02:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:13	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-28D **Lab ID: 92507939011** Collected: 11/23/20 14:35 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 02:13	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 02:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 02:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 02:13	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 02:13	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 02:13	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 02:13	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 02:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 02:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 02:13	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	1		11/26/20 02:13	460-00-4	
1,2-Dichloroethane-d4 (S)	125	%	70-130	1		11/26/20 02:13	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 02:13	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**4.2**	ug/L	2.0	1		11/24/20 23:26	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		11/24/20 23:26	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/24/20 23:26	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-25D-130 **Lab ID: 92507939012** Collected: 11/23/20 15:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 04:20	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 04:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 04:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 04:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 04:20	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 04:20	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 04:20	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 04:20	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 04:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 04:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 04:20	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 04:20	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 04:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 04:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 04:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 04:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 04:20	75-71-8	
1,1-Dichloroethane	**3.3**	ug/L	1.0	1		11/26/20 04:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 04:20	107-06-2	
1,1-Dichloroethene	**76.0**	ug/L	1.0	1		11/26/20 04:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:20	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 04:20	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 04:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 04:20	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 04:20	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 04:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 04:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 04:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 04:20	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 04:20	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 04:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:20	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-25D-130 **Lab ID: 92507939012** Collected: 11/23/20 15:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 04:20	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 04:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:20	120-82-1	
1,1,1-Trichloroethane	**4.9**	ug/L	1.0	1		11/26/20 04:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 04:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 04:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 04:20	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 04:20	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 04:20	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 04:20	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 04:20	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 04:20	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 04:20	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		11/26/20 04:20	460-00-4	
1,2-Dichloroethane-d4 (S)	121	%	70-130	1		11/26/20 04:20	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 04:20	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**32.4**	ug/L	2.0	1		11/24/20 23:45	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/24/20 23:45	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 23:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-25D-190 MS/MSD **Lab ID: 92507939013** Collected: 11/23/20 16:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		12/01/20 19:46	67-64-1	
Benzene	ND	ug/L	1.0	1		12/01/20 19:46	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/01/20 19:46	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/01/20 19:46	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/01/20 19:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/01/20 19:46	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/01/20 19:46	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		12/01/20 19:46	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/01/20 19:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/01/20 19:46	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/01/20 19:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/01/20 19:46	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/01/20 19:46	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/01/20 19:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/01/20 19:46	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/01/20 19:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/01/20 19:46	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/01/20 19:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/01/20 19:46	75-71-8	
1,1-Dichloroethane	**11.3**	ug/L	1.0	1		12/01/20 19:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/01/20 19:46	107-06-2	
1,1-Dichloroethene	**46.9**	ug/L	1.0	1		12/01/20 19:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/01/20 19:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/01/20 19:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/01/20 19:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/01/20 19:46	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/01/20 19:46	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/01/20 19:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/01/20 19:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/01/20 19:46	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/01/20 19:46	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/01/20 19:46	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/01/20 19:46	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/01/20 19:46	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/01/20 19:46	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/01/20 19:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/01/20 19:46	108-10-1	v2
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/01/20 19:46	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/01/20 19:46	91-20-3	
Styrene	ND	ug/L	1.0	1		12/01/20 19:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/01/20 19:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/01/20 19:46	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-25D-190 MS/MSD **Lab ID: 92507939013** Collected: 11/23/20 16:00 Received: 11/24/20 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		12/01/20 19:46	127-18-4	
Toluene	ND	ug/L	1.0	1		12/01/20 19:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/01/20 19:46	120-82-1	
1,1,1-Trichloroethane	**5.8**	ug/L	1.0	1		12/01/20 19:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/01/20 19:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/01/20 19:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/01/20 19:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/01/20 19:46	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/01/20 19:46	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/01/20 19:46	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/01/20 19:46	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/01/20 19:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/01/20 19:46	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		12/01/20 19:46	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		12/01/20 19:46	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1		12/01/20 19:46	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**41.5**	ug/L	2.0	1		11/25/20 00:05	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/25/20 00:05	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/25/20 00:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-31D **Lab ID: 92507939014** Collected: 11/23/20 12:55 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 01:36	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 01:36	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 01:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 01:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 01:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 01:36	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 01:36	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 01:36	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 01:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 01:36	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 01:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 01:36	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:36	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 01:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 01:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 01:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 01:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 01:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:36	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 01:36	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 01:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 01:36	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 01:36	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 01:36	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 01:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 01:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 01:36	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 01:36	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 01:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:36	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-31D **Lab ID: 92507939014** Collected: 11/23/20 12:55 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 01:36	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 01:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 01:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 01:36	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 01:36	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 01:36	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 01:36	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 01:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 01:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 01:36	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/26/20 01:36	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70-130	1		11/26/20 01:36	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		11/26/20 01:36	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/25/20 18:55	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		11/25/20 18:55	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/25/20 18:55	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-36D **Lab ID: 92507939015** Collected: 11/23/20 14:55 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 01:54	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 01:54	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 01:54	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 01:54	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 01:54	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 01:54	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 01:54	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 01:54	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 01:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 01:54	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 01:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 01:54	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:54	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 01:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 01:54	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 01:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 01:54	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 01:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 01:54	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 01:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 01:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 01:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 01:54	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 01:54	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 01:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 01:54	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 01:54	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 01:54	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 01:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 01:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 01:54	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 01:54	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 01:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 01:54	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-36D **Lab ID: 92507939015** Collected: 11/23/20 14:55 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 01:54	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 01:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 01:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 01:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 01:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 01:54	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 01:54	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 01:54	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 01:54	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 01:54	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 01:54	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 01:54	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/20 01:54	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	70-130	1		11/26/20 01:54	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 01:54	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/25/20 19:14	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		11/25/20 19:14	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 19:14	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-46D **Lab ID: 92507939016** Collected: 11/23/20 16:40 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 03:44	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 03:44	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 03:44	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 03:44	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 03:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 03:44	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 03:44	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 03:44	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 03:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 03:44	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 03:44	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 03:44	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:44	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:44	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 03:44	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 03:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 03:44	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 03:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 03:44	75-71-8	
1,1-Dichloroethane	**18.4**	ug/L	1.0	1		11/26/20 03:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 03:44	107-06-2	
1,1-Dichloroethene	**124**	ug/L	1.0	1		11/26/20 03:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:44	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:44	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:44	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:44	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 03:44	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 03:44	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 03:44	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 03:44	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 03:44	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 03:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 03:44	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 03:44	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 03:44	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 03:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:44	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: MW-46D **Lab ID: 92507939016** Collected: 11/23/20 16:40 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 03:44	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 03:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:44	120-82-1	
1,1,1-Trichloroethane	**6.4**	ug/L	1.0	1		11/26/20 03:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 03:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 03:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 03:44	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 03:44	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 03:44	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 03:44	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 03:44	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 03:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 03:44	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/20 03:44	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	70-130	1		11/26/20 03:44	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 03:44	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**29.8**	ug/L	2.0	1		11/25/20 21:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		11/25/20 21:30	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 21:30	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: TRIP BLANK **Lab ID: 92507939017** Collected: 11/23/20 16:40 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	1		11/26/20 00:59	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 00:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 00:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 00:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 00:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 00:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 00:59	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 00:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 00:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 00:59	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 00:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 00:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 00:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 00:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 00:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 00:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 00:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 00:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 00:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 00:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 00:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 00:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 00:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 00:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 00:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 00:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 00:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 00:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 00:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 00:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 00:59	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 00:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 00:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 00:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 00:59	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 00:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 00:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 00:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 00:59	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 00:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 00:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 00:59	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507939

Sample: TRIP BLANK **Lab ID: 92507939017** Collected: 11/23/20 16:40 Received: 11/25/20 11:42 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D MSV Low Level	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	1		11/26/20 00:59	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 00:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 00:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 00:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 00:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 00:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 00:59	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 00:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 00:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 00:59	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 00:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 00:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 00:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		11/26/20 00:59	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	70-130	1		11/26/20 00:59	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 00:59	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		11/25/20 18:16	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		11/25/20 18:16	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 18:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 582948 | Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D | Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939001, 92507939003, 92507939004, 92507939005, 92507939006, 92507939007

METHOD BLANK: 3082529 Matrix: Water
Associated Lab Samples: 92507939001, 92507939003, 92507939004, 92507939005, 92507939006, 92507939007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,1,1-Trichloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,1-Dichloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,1-Dichloroethene	ug/L	ND	1.0	11/25/20 12:10	
1,1-Dichloropropene	ug/L	ND	1.0	11/25/20 12:10	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/25/20 12:10	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	11/25/20 12:10	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	11/25/20 12:10	
1,2-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
1,2-Dichloroethane	ug/L	ND	1.0	11/25/20 12:10	
1,2-Dichloropropane	ug/L	ND	1.0	11/25/20 12:10	
1,3-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
1,3-Dichloropropane	ug/L	ND	1.0	11/25/20 12:10	
1,4-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
2,2-Dichloropropane	ug/L	ND	1.0	11/25/20 12:10	
2-Butanone (MEK)	ug/L	ND	5.0	11/25/20 12:10	
2-Chlorotoluene	ug/L	ND	1.0	11/25/20 12:10	
2-Hexanone	ug/L	ND	5.0	11/25/20 12:10	
4-Chlorotoluene	ug/L	ND	1.0	11/25/20 12:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	11/25/20 12:10	
Acetone	ug/L	ND	25.0	11/25/20 12:10	
Benzene	ug/L	ND	1.0	11/25/20 12:10	
Bromobenzene	ug/L	ND	1.0	11/25/20 12:10	
Bromochloromethane	ug/L	ND	1.0	11/25/20 12:10	
Bromodichloromethane	ug/L	ND	1.0	11/25/20 12:10	
Bromoform	ug/L	ND	1.0	11/25/20 12:10	
Bromomethane	ug/L	ND	2.0	11/25/20 12:10	IK
Carbon tetrachloride	ug/L	ND	1.0	11/25/20 12:10	
Chlorobenzene	ug/L	ND	1.0	11/25/20 12:10	
Chloroethane	ug/L	ND	1.0	11/25/20 12:10	
Chloroform	ug/L	ND	5.0	11/25/20 12:10	
Chloromethane	ug/L	ND	1.0	11/25/20 12:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/25/20 12:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/25/20 12:10	
Dibromochloromethane	ug/L	ND	1.0	11/25/20 12:10	
Dibromomethane	ug/L	ND	1.0	11/25/20 12:10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

METHOD BLANK: 3082529 Matrix: Water
Associated Lab Samples: 92507939001, 92507939003, 92507939004, 92507939005, 92507939006, 92507939007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	11/25/20 12:10	
Diisopropyl ether	ug/L	ND	1.0	11/25/20 12:10	
Ethylbenzene	ug/L	ND	1.0	11/25/20 12:10	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	11/25/20 12:10	
m&p-Xylene	ug/L	ND	2.0	11/25/20 12:10	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/25/20 12:10	
Methylene Chloride	ug/L	ND	5.0	11/25/20 12:10	
Naphthalene	ug/L	ND	1.0	11/25/20 12:10	
o-Xylene	ug/L	ND	1.0	11/25/20 12:10	
p-Isopropyltoluene	ug/L	ND	1.0	11/25/20 12:10	
Styrene	ug/L	ND	1.0	11/25/20 12:10	
Tetrachloroethene	ug/L	ND	1.0	11/25/20 12:10	
Toluene	ug/L	ND	1.0	11/25/20 12:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/25/20 12:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/25/20 12:10	
Trichloroethene	ug/L	ND	1.0	11/25/20 12:10	
Trichlorofluoromethane	ug/L	ND	1.0	11/25/20 12:10	
Vinyl acetate	ug/L	ND	2.0	11/25/20 12:10	
Vinyl chloride	ug/L	ND	1.0	11/25/20 12:10	
Xylene (Total)	ug/L	ND	1.0	11/25/20 12:10	
1,2-Dichloroethane-d4 (S)	%	96	70-130	11/25/20 12:10	
4-Bromofluorobenzene (S)	%	101	70-130	11/25/20 12:10	
Toluene-d8 (S)	%	100	70-130	11/25/20 12:10	

LABORATORY CONTROL SAMPLE: 3082530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.0	96	70-130	
1,1,1-Trichloroethane	ug/L	50	47.8	96	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	46.5	93	70-130	
1,1,2-Trichloroethane	ug/L	50	43.6	87	70-130	
1,1-Dichloroethane	ug/L	50	48.5	97	70-130	
1,1-Dichloroethene	ug/L	50	50.9	102	70-132	
1,1-Dichloropropene	ug/L	50	49.9	100	70-131	
1,2,3-Trichlorobenzene	ug/L	50	48.9	98	70-134	
1,2,3-Trichloropropane	ug/L	50	47.8	96	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.9	102	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	48.0	96	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	48.0	96	70-130	
1,2-Dichlorobenzene	ug/L	50	49.6	99	70-130	
1,2-Dichloroethane	ug/L	50	45.5	91	70-130	
1,2-Dichloropropane	ug/L	50	48.1	96	70-130	
1,3-Dichlorobenzene	ug/L	50	46.7	93	70-130	
1,3-Dichloropropane	ug/L	50	50.9	102	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

LABORATORY CONTROL SAMPLE: 3082530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	48.2	96	70-130	
2,2-Dichloropropane	ug/L	50	55.4	111	70-130	
2-Butanone (MEK)	ug/L	100	93.4	93	70-133	
2-Chlorotoluene	ug/L	50	47.6	95	70-130	
2-Hexanone	ug/L	100	88.1	88	70-130	
4-Chlorotoluene	ug/L	50	46.8	94	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.8	88	70-130	
Acetone	ug/L	100	94.7	95	70-144	
Benzene	ug/L	50	47.6	95	70-130	
Bromobenzene	ug/L	50	47.5	95	70-130	
Bromochloromethane	ug/L	50	48.1	96	70-130	
Bromodichloromethane	ug/L	50	43.6	87	70-130	
Bromoform	ug/L	50	49.1	98	70-131	
Bromomethane	ug/L	50	54.5	109	30-177	IK
Carbon tetrachloride	ug/L	50	48.3	97	70-130	
Chlorobenzene	ug/L	50	47.2	94	70-130	
Chloroethane	ug/L	50	42.9	86	46-131	
Chloroform	ug/L	50	48.9	98	70-130	
Chloromethane	ug/L	50	50.2	100	49-130	
cis-1,2-Dichloroethene	ug/L	50	47.5	95	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.5	99	70-130	
Dibromochloromethane	ug/L	50	51.3	103	70-130	
Dibromomethane	ug/L	50	46.5	93	70-130	
Dichlorodifluoromethane	ug/L	50	48.0	96	52-134	
Diisopropyl ether	ug/L	50	45.3	91	70-131	
Ethylbenzene	ug/L	50	47.2	94	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.6	101	70-131	
m&p-Xylene	ug/L	100	93.8	94	70-130	
Methyl-tert-butyl ether	ug/L	50	46.4	93	70-130	
Methylene Chloride	ug/L	50	45.9	92	68-130	
Naphthalene	ug/L	50	48.3	97	70-133	
o-Xylene	ug/L	50	47.1	94	70-130	
p-Isopropyltoluene	ug/L	50	48.8	98	70-130	
Styrene	ug/L	50	46.6	93	70-130	
Tetrachloroethene	ug/L	50	47.2	94	70-130	
Toluene	ug/L	50	45.9	92	70-130	
trans-1,2-Dichloroethene	ug/L	50	50.0	100	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.6	101	70-130	
Trichloroethene	ug/L	50	49.0	98	70-130	
Trichlorofluoromethane	ug/L	50	48.2	96	61-130	
Vinyl acetate	ug/L	100	119	119	70-140	
Vinyl chloride	ug/L	50	48.0	96	59-142	
Xylene (Total)	ug/L	150	141	94	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			98	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3082531 3082532

Parameter	Units	92507532001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.8	24.1	104	120	70-135	14	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	21.0	25.4	105	127	70-148	19	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.8	24.3	104	122	70-131	16	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	24.3	100	122	70-136	19	30	
1,1-Dichloroethane	ug/L	ND	20	20	22.9	26.7	114	134	70-147	16	30	
1,1-Dichloroethene	ug/L	ND	20	20	23.1	26.7	116	134	70-158	14	30	
1,1-Dichloropropene	ug/L	ND	20	20	23.1	27.2	115	136	70-149	16	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	20.8	22.6	104	113	68-140	9	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	20.5	25.5	102	128	67-137	22	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	22.0	24.2	110	121	70-139	10	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	19.6	23.6	98	118	69-136	18	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	21.5	26.1	108	130	70-137	19	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	21.3	23.7	106	118	70-133	11	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.8	24.6	104	123	67-138	17	30	
1,2-Dichloropropane	ug/L	ND	20	20	22.3	26.9	112	135	70-138	19	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.4	22.2	102	111	70-133	8	30	
1,3-Dichloropropane	ug/L	ND	20	20	24.0	27.9	120	139	70-136	15	30	M1
1,4-Dichlorobenzene	ug/L	ND	20	20	20.8	22.9	104	115	70-133	10	30	
2,2-Dichloropropane	ug/L	ND	20	20	23.8	28.5	119	143	52-155	18	30	
2-Butanone (MEK)	ug/L	ND	40	40	39.9	44.6	100	112	61-147	11	30	
2-Chlorotoluene	ug/L	ND	20	20	21.2	22.3	106	111	70-141	5	30	
2-Hexanone	ug/L	ND	40	40	37.6	43.9	94	110	67-139	15	30	
4-Chlorotoluene	ug/L	ND	20	20	20.5	22.2	103	111	70-135	8	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	38.9	44.2	97	111	67-136	13	30	
Acetone	ug/L	ND	40	40	42.6	41.4	106	103	55-159	3	30	
Benzene	ug/L	ND	20	20	23.2	26.3	116	132	67-150	13	30	
Bromobenzene	ug/L	ND	20	20	20.8	22.4	104	112	70-134	7	30	
Bromochloromethane	ug/L	ND	20	20	23.1	26.5	115	133	70-146	14	30	
Bromodichloromethane	ug/L	ND	20	20	20.2	23.2	101	116	70-138	14	30	
Bromoform	ug/L	ND	20	20	19.5	24.6	97	123	57-138	23	30	
Bromomethane	ug/L	ND	20	20	29.5	35.1	147	176	10-200	17	30	IK
Carbon tetrachloride	ug/L	ND	20	20	21.4	26.0	107	130	70-147	20	30	
Chlorobenzene	ug/L	ND	20	20	21.4	24.8	107	124	70-137	15	30	
Chloroethane	ug/L	ND	20	20	22.8	36.2	114	181	51-166	45	30	M1,R1
Chloroform	ug/L	ND	20	20	22.2	26.2	111	131	70-144	16	30	
Chloromethane	ug/L	ND	20	20	22.6	337	113	1680	24-161	175	30	E,M1, R1
cis-1,2-Dichloroethene	ug/L	ND	20	20	22.3	25.5	112	128	67-148	13	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	23.4	21.5	117	108	70-142	9	30	
Dibromochloromethane	ug/L	ND	20	20	21.9	27.0	109	135	68-138	21	30	
Dibromomethane	ug/L	ND	20	20	21.4	25.1	107	126	70-134	16	30	
Dichlorodifluoromethane	ug/L	ND	20	20	20.9	25.8	104	129	43-155	21	30	
Diisopropyl ether	ug/L	ND	20	20	20.4	23.3	102	116	65-146	13	30	
Ethylbenzene	ug/L	ND	20	20	20.8	24.2	104	121	68-143	15	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3082531 3082532

Parameter	Units	92507532001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Hexachloro-1,3-butadiene	ug/L	ND	20	20	21.2	23.7	106	119	62-151	11	30	
m&p-Xylene	ug/L	ND	40	40	41.1	47.3	103	118	53-157	14	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.9	24.1	104	121	59-156	15	30	
Methylene Chloride	ug/L	ND	20	20	21.5	24.7	107	124	64-148	14	30	
Naphthalene	ug/L	ND	20	20	20.9	22.5	104	112	57-150	7	30	
o-Xylene	ug/L	ND	20	20	20.7	23.8	103	119	68-143	14	30	
p-Isopropyltoluene	ug/L	ND	20	20	20.4	23.6	102	118	70-141	14	30	
Styrene	ug/L	ND	20	20	21.2	24.3	106	122	70-136	13	30	
Tetrachloroethene	ug/L	ND	20	20	20.0	23.4	100	117	70-139	16	30	
Toluene	ug/L	ND	20	20	21.6	24.5	108	122	47-157	12	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.7	26.7	114	133	70-149	16	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	22.3	24.5	111	123	70-138	10	30	
Trichloroethene	ug/L	ND	20	20	22.0	25.7	110	128	70-149	15	30	
Trichlorofluoromethane	ug/L	ND	20	20	21.4	24.4	107	122	61-154	13	30	
Vinyl acetate	ug/L	ND	40	40	52.6	62.3	132	156	48-156	17	30	
Vinyl chloride	ug/L	ND	20	20	20.7	23.8	103	119	55-172	14	30	
Xylene (Total)	ug/L	ND	60	60	61.8	71.1	103	119	66-145	14	30	
1,2-Dichloroethane-d4 (S)	%						96	99	70-130			
4-Bromofluorobenzene (S)	%						100	101	70-130			
Toluene-d8 (S)	%						100	99	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 583045 Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939009, 92507939010, 92507939011, 92507939012, 92507939014, 92507939015, 92507939016, 92507939017

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507939009, 92507939010, 92507939011, 92507939012, 92507939014, 92507939015, 92507939016, 92507939017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,1,1-Trichloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,1-Dichloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,1-Dichloroethene	ug/L	ND	1.0	11/26/20 00:23	
1,1-Dichloropropene	ug/L	ND	1.0	11/26/20 00:23	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/26/20 00:23	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	11/26/20 00:23	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	11/26/20 00:23	
1,2-Dichlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
1,2-Dichloroethane	ug/L	ND	1.0	11/26/20 00:23	
1,2-Dichloropropane	ug/L	ND	1.0	11/26/20 00:23	
1,3-Dichlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
1,3-Dichloropropane	ug/L	ND	1.0	11/26/20 00:23	
1,4-Dichlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
2,2-Dichloropropane	ug/L	ND	1.0	11/26/20 00:23	
2-Butanone (MEK)	ug/L	ND	5.0	11/26/20 00:23	
2-Chlorotoluene	ug/L	ND	1.0	11/26/20 00:23	
2-Hexanone	ug/L	ND	5.0	11/26/20 00:23	
4-Chlorotoluene	ug/L	ND	1.0	11/26/20 00:23	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	11/26/20 00:23	
Acetone	ug/L	ND	25.0	11/26/20 00:23	
Benzene	ug/L	ND	1.0	11/26/20 00:23	
Bromobenzene	ug/L	ND	1.0	11/26/20 00:23	
Bromochloromethane	ug/L	ND	1.0	11/26/20 00:23	
Bromodichloromethane	ug/L	ND	1.0	11/26/20 00:23	
Bromoform	ug/L	ND	1.0	11/26/20 00:23	
Bromomethane	ug/L	ND	2.0	11/26/20 00:23	v2
Carbon tetrachloride	ug/L	ND	1.0	11/26/20 00:23	
Chlorobenzene	ug/L	ND	1.0	11/26/20 00:23	
Chloroethane	ug/L	ND	1.0	11/26/20 00:23	
Chloroform	ug/L	ND	5.0	11/26/20 00:23	
Chloromethane	ug/L	ND	1.0	11/26/20 00:23	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/26/20 00:23	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/26/20 00:23	
Dibromochloromethane	ug/L	ND	1.0	11/26/20 00:23	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507939009, 92507939010, 92507939011, 92507939012, 92507939014, 92507939015, 92507939016, 92507939017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	11/26/20 00:23	
Dichlorodifluoromethane	ug/L	ND	1.0	11/26/20 00:23	
Diisopropyl ether	ug/L	ND	1.0	11/26/20 00:23	
Ethylbenzene	ug/L	ND	1.0	11/26/20 00:23	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	11/26/20 00:23	
m&p-Xylene	ug/L	ND	2.0	11/26/20 00:23	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/26/20 00:23	
Methylene Chloride	ug/L	ND	5.0	11/26/20 00:23	
Naphthalene	ug/L	ND	1.0	11/26/20 00:23	
o-Xylene	ug/L	ND	1.0	11/26/20 00:23	
p-Isopropyltoluene	ug/L	ND	1.0	11/26/20 00:23	
Styrene	ug/L	ND	1.0	11/26/20 00:23	
Tetrachloroethene	ug/L	ND	1.0	11/26/20 00:23	
Toluene	ug/L	ND	1.0	11/26/20 00:23	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/26/20 00:23	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/26/20 00:23	
Trichloroethene	ug/L	ND	1.0	11/26/20 00:23	
Trichlorofluoromethane	ug/L	ND	1.0	11/26/20 00:23	v1
Vinyl acetate	ug/L	ND	2.0	11/26/20 00:23	
Vinyl chloride	ug/L	ND	1.0	11/26/20 00:23	
Xylene (Total)	ug/L	ND	1.0	11/26/20 00:23	
1,2-Dichloroethane-d4 (S)	%	118	70-130	11/26/20 00:23	
4-Bromofluorobenzene (S)	%	100	70-130	11/26/20 00:23	
Toluene-d8 (S)	%	103	70-130	11/26/20 00:23	

LABORATORY CONTROL SAMPLE: 3083149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	55.9	112	70-130	
1,1,1-Trichloroethane	ug/L	50	60.4	121	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	51.8	104	70-130	
1,1,2-Trichloroethane	ug/L	50	53.9	108	70-130	
1,1-Dichloroethane	ug/L	50	54.5	109	70-130	
1,1-Dichloroethene	ug/L	50	62.3	125	70-132	
1,1-Dichloropropene	ug/L	50	53.4	107	70-131	
1,2,3-Trichlorobenzene	ug/L	50	57.4	115	70-134	
1,2,3-Trichloropropane	ug/L	50	53.8	108	70-130	
1,2,4-Trichlorobenzene	ug/L	50	56.7	113	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	55.9	112	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	53.9	108	70-130	
1,2-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,2-Dichloroethane	ug/L	50	59.8	120	70-130	
1,2-Dichloropropane	ug/L	50	49.8	100	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

LABORATORY CONTROL SAMPLE: 3083149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	50	50.5	101	70-130	
1,3-Dichloropropane	ug/L	50	51.7	103	70-130	
1,4-Dichlorobenzene	ug/L	50	50.2	100	70-130	
2,2-Dichloropropane	ug/L	50	59.1	118	70-130	
2-Butanone (MEK)	ug/L	100	115	115	70-133	
2-Chlorotoluene	ug/L	50	50.2	100	70-130	
2-Hexanone	ug/L	100	116	116	70-130	
4-Chlorotoluene	ug/L	50	48.6	97	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	70-130	
Acetone	ug/L	100	130	130	70-144	
Benzene	ug/L	50	50.5	101	70-130	
Bromobenzene	ug/L	50	50.7	101	70-130	
Bromochloromethane	ug/L	50	51.6	103	70-130	
Bromodichloromethane	ug/L	50	51.7	103	70-130	
Bromoform	ug/L	50	54.6	109	70-131	
Bromomethane	ug/L	50	47.4	95	30-177	v3
Carbon tetrachloride	ug/L	50	62.9	126	70-130	
Chlorobenzene	ug/L	50	50.6	101	70-130	
Chloroethane	ug/L	50	54.3	109	46-131	
Chloroform	ug/L	50	52.3	105	70-130	
Chloromethane	ug/L	50	42.7	85	49-130	
cis-1,2-Dichloroethene	ug/L	50	53.4	107	70-130	
cis-1,3-Dichloropropene	ug/L	50	55.0	110	70-130	
Dibromochloromethane	ug/L	50	56.2	112	70-130	
Dibromomethane	ug/L	50	55.6	111	70-130	
Dichlorodifluoromethane	ug/L	50	56.0	112	52-134	
Diisopropyl ether	ug/L	50	50.1	100	70-131	
Ethylbenzene	ug/L	50	50.7	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	57.7	115	70-131	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	54.1	108	70-130	
Methylene Chloride	ug/L	50	51.7	103	68-130	
Naphthalene	ug/L	50	56.7	113	70-133	
o-Xylene	ug/L	50	50.2	100	70-130	
p-Isopropyltoluene	ug/L	50	49.9	100	70-130	
Styrene	ug/L	50	51.8	104	70-130	
Tetrachloroethene	ug/L	50	52.6	105	70-130	
Toluene	ug/L	50	51.6	103	70-130	
trans-1,2-Dichloroethene	ug/L	50	56.0	112	70-130	
trans-1,3-Dichloropropene	ug/L	50	55.8	112	70-130	
Trichloroethene	ug/L	50	56.1	112	70-130	
Trichlorofluoromethane	ug/L	50	61.5	123	61-130	v1
Vinyl acetate	ug/L	100	123	123	70-140	
Vinyl chloride	ug/L	50	49.8	100	59-142	
Xylene (Total)	ug/L	150	155	103	70-130	
1,2-Dichloroethane-d4 (S)	%			116	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

LABORATORY CONTROL SAMPLE: 3083149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3083150 3083151

Parameter	Units	92507939009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	19.7	20.9	98	105	70-135	6	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	22.5	22.6	113	113	70-148	0	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	15.7	27.0	78	135	70-131	53	30	M1,R1
1,1,2-Trichloroethane	ug/L	ND	20	20	26.7	21.5	134	107	70-136	22	30	
1,1-Dichloroethane	ug/L	ND	20	20	21.3	21.4	107	107	70-147	1	30	
1,1-Dichloroethene	ug/L	ND	20	20	21.0	21.3	105	107	70-158	1	30	
1,1-Dichloropropene	ug/L	ND	20	20	21.3	21.7	107	109	70-149	2	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	18.1	17.7	90	89	68-140	2	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	15.7	26.3	78	132	67-137	51	30	R1
1,2,4-Trichlorobenzene	ug/L	ND	20	20	17.9	17.5	89	88	70-139	2	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	22.4	21.1	112	105	69-136	6	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	21.1	21.8	106	109	70-137	3	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.0	19.2	100	96	70-133	4	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.3	21.2	102	106	67-138	4	30	
1,2-Dichloropropane	ug/L	ND	20	20	26.4	20.9	132	105	70-138	23	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	19.5	21.4	97	107	70-133	9	30	
1,3-Dichloropropane	ug/L	ND	20	20	21.4	21.7	107	109	70-136	1	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.8	21.2	99	106	70-133	7	30	
2,2-Dichloropropane	ug/L	ND	20	20	14.6	15.1	73	75	52-155	3	30	
2-Butanone (MEK)	ug/L	ND	40	40	44.6	44.3	111	111	61-147	1	30	
2-Chlorotoluene	ug/L	ND	20	20	20.7	26.5	104	132	70-141	24	30	
2-Hexanone	ug/L	ND	40	40	40.7	40.6	102	101	67-139	0	30	
4-Chlorotoluene	ug/L	ND	20	20	19.6	23.8	98	119	70-135	19	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	51.2	41.4	128	103	67-136	21	30	
Acetone	ug/L	ND	40	40	46.4	46.0	116	115	55-159	1	30	
Benzene	ug/L	ND	20	20	20.9	22.4	105	112	67-150	7	30	
Bromobenzene	ug/L	ND	20	20	21.8	25.6	109	128	70-134	16	30	
Bromochloromethane	ug/L	ND	20	20	22.4	22.4	112	112	70-146	0	30	
Bromodichloromethane	ug/L	ND	20	20	23.7	20.3	118	102	70-138	15	30	
Bromoform	ug/L	ND	20	20	18.5	19.6	92	98	57-138	6	30	
Bromomethane	ug/L	ND	20	20	23.7	23.8	119	119	10-200	0	30	
Carbon tetrachloride	ug/L	ND	20	20	21.8	24.2	109	121	70-147	11	30	
Chlorobenzene	ug/L	ND	20	20	21.1	21.3	106	107	70-137	1	30	
Chloroethane	ug/L	ND	20	20	20.0	21.0	100	105	51-166	5	30	IK,v3
Chloroform	ug/L	ND	20	20	22.4	23.2	112	116	70-144	3	30	
Chloromethane	ug/L	ND	20	20	19.4	19.8	97	99	24-161	2	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.2	22.2	106	111	67-148	5	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	23.7	20.1	119	100	70-142	17	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3083150 3083151

Parameter	Units	92507939009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromochloromethane	ug/L	ND	20	20	21.5	22.8	107	114	68-138	6	30	
Dibromomethane	ug/L	ND	20	20	23.7	20.0	118	100	70-134	17	30	
Dichlorodifluoromethane	ug/L	ND	20	20	14.7	15.2	74	76	43-155	3	30	
Diisopropyl ether	ug/L	ND	20	20	19.8	19.9	99	100	65-146	1	30	
Ethylbenzene	ug/L	ND	20	20	20.0	20.7	100	103	68-143	3	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	17.2	16.3	86	81	62-151	6	30	
m&p-Xylene	ug/L	ND	40	40	40.4	42.0	101	105	53-157	4	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	19.6	19.8	98	99	59-156	1	30	
Methylene Chloride	ug/L	ND	20	20	20.6	20.3	103	102	64-148	1	30	
Naphthalene	ug/L	ND	20	20	20.2	19.7	101	98	57-150	2	30	
o-Xylene	ug/L	ND	20	20	21.5	22.0	107	110	68-143	2	30	
p-Isopropyltoluene	ug/L	ND	20	20	19.2	21.5	96	107	70-141	11	30	
Styrene	ug/L	ND	20	20	20.8	21.4	104	107	70-136	3	30	
Tetrachloroethene	ug/L	ND	20	20	19.0	19.7	95	98	70-139	4	30	
Toluene	ug/L	ND	20	20	26.5	21.8	132	109	47-157	19	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.8	20.5	99	102	70-149	3	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	24.5	21.0	123	105	70-138	15	30	
Trichloroethene	ug/L	ND	20	20	20.8	22.2	104	111	70-149	7	30	
Trichlorofluoromethane	ug/L	ND	20	20	20.3	20.3	101	102	61-154	0	30	
Vinyl acetate	ug/L	ND	40	40	28.1	27.6	70	69	48-156	2	30	
Vinyl chloride	ug/L	ND	20	20	19.4	19.4	97	97	55-172	0	30	
Xylene (Total)	ug/L	ND	60	60	61.9	63.9	103	107	66-145	3	30	
1,2-Dichloroethane-d4 (S)	%						102	103	70-130			
4-Bromofluorobenzene (S)	%						87	107	70-130			
Toluene-d8 (S)	%						125	101	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 583280
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939002, 92507939008, 92507939013

METHOD BLANK: 3084190 Matrix: Water
Associated Lab Samples: 92507939002, 92507939008, 92507939013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,1-Dichloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,1-Dichloroethene	ug/L	ND	1.0	12/01/20 14:48	
1,1-Dichloropropene	ug/L	ND	1.0	12/01/20 14:48	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/01/20 14:48	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/01/20 14:48	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/01/20 14:48	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
1,2-Dichloroethane	ug/L	ND	1.0	12/01/20 14:48	
1,2-Dichloropropane	ug/L	ND	1.0	12/01/20 14:48	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
1,3-Dichloropropane	ug/L	ND	1.0	12/01/20 14:48	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
2,2-Dichloropropane	ug/L	ND	1.0	12/01/20 14:48	
2-Butanone (MEK)	ug/L	ND	5.0	12/01/20 14:48	
2-Chlorotoluene	ug/L	ND	1.0	12/01/20 14:48	
2-Hexanone	ug/L	ND	5.0	12/01/20 14:48	
4-Chlorotoluene	ug/L	ND	1.0	12/01/20 14:48	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/01/20 14:48	v2
Acetone	ug/L	ND	25.0	12/01/20 14:48	
Benzene	ug/L	ND	1.0	12/01/20 14:48	
Bromobenzene	ug/L	ND	1.0	12/01/20 14:48	
Bromochloromethane	ug/L	ND	1.0	12/01/20 14:48	
Bromodichloromethane	ug/L	ND	1.0	12/01/20 14:48	
Bromoform	ug/L	ND	1.0	12/01/20 14:48	
Bromomethane	ug/L	ND	2.0	12/01/20 14:48	v2
Carbon tetrachloride	ug/L	ND	1.0	12/01/20 14:48	
Chlorobenzene	ug/L	ND	1.0	12/01/20 14:48	
Chloroethane	ug/L	ND	1.0	12/01/20 14:48	
Chloroform	ug/L	ND	5.0	12/01/20 14:48	
Chloromethane	ug/L	ND	1.0	12/01/20 14:48	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/01/20 14:48	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/01/20 14:48	
Dibromochloromethane	ug/L	ND	1.0	12/01/20 14:48	
Dibromomethane	ug/L	ND	1.0	12/01/20 14:48	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

METHOD BLANK: 3084190 Matrix: Water
Associated Lab Samples: 92507939002, 92507939008, 92507939013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/01/20 14:48	
Diisopropyl ether	ug/L	ND	1.0	12/01/20 14:48	
Ethylbenzene	ug/L	ND	1.0	12/01/20 14:48	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/01/20 14:48	
m&p-Xylene	ug/L	ND	2.0	12/01/20 14:48	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/01/20 14:48	
Methylene Chloride	ug/L	ND	5.0	12/01/20 14:48	
Naphthalene	ug/L	ND	1.0	12/01/20 14:48	
o-Xylene	ug/L	ND	1.0	12/01/20 14:48	
p-Isopropyltoluene	ug/L	ND	1.0	12/01/20 14:48	
Styrene	ug/L	ND	1.0	12/01/20 14:48	
Tetrachloroethene	ug/L	ND	1.0	12/01/20 14:48	
Toluene	ug/L	ND	1.0	12/01/20 14:48	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/01/20 14:48	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/01/20 14:48	
Trichloroethene	ug/L	ND	1.0	12/01/20 14:48	
Trichlorofluoromethane	ug/L	ND	1.0	12/01/20 14:48	
Vinyl acetate	ug/L	ND	2.0	12/01/20 14:48	
Vinyl chloride	ug/L	ND	1.0	12/01/20 14:48	
Xylene (Total)	ug/L	ND	1.0	12/01/20 14:48	
1,2-Dichloroethane-d4 (S)	%	94	70-130	12/01/20 14:48	
4-Bromofluorobenzene (S)	%	98	70-130	12/01/20 14:48	
Toluene-d8 (S)	%	105	70-130	12/01/20 14:48	

LABORATORY CONTROL SAMPLE: 3084191

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.0	104	70-130	
1,1,1-Trichloroethane	ug/L	50	43.5	87	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.6	95	70-130	
1,1,2-Trichloroethane	ug/L	50	44.6	89	70-130	
1,1-Dichloroethane	ug/L	50	42.6	85	70-130	
1,1-Dichloroethene	ug/L	50	44.2	88	70-132	
1,1-Dichloropropene	ug/L	50	45.6	91	70-131	
1,2,3-Trichlorobenzene	ug/L	50	53.2	106	70-134	
1,2,3-Trichloropropane	ug/L	50	51.0	102	70-130	
1,2,4-Trichlorobenzene	ug/L	50	54.2	108	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.9	102	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	54.0	108	70-130	
1,2-Dichlorobenzene	ug/L	50	53.4	107	70-130	
1,2-Dichloroethane	ug/L	50	40.2	80	70-130	
1,2-Dichloropropane	ug/L	50	46.2	92	70-130	
1,3-Dichlorobenzene	ug/L	50	54.0	108	70-130	
1,3-Dichloropropane	ug/L	50	54.3	109	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

LABORATORY CONTROL SAMPLE: 3084191

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	53.7	107	70-130	
2,2-Dichloropropane	ug/L	50	43.0	86	70-130	
2-Butanone (MEK)	ug/L	100	82.3	82	70-133	
2-Chlorotoluene	ug/L	50	53.2	106	70-130	
2-Hexanone	ug/L	100	88.0	88	70-130	
4-Chlorotoluene	ug/L	50	53.2	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	74.4	74	70-130	v3
Acetone	ug/L	100	86.8	87	70-144	
Benzene	ug/L	50	45.2	90	70-130	
Bromobenzene	ug/L	50	53.2	106	70-130	
Bromochloromethane	ug/L	50	44.6	89	70-130	
Bromodichloromethane	ug/L	50	43.1	86	70-130	
Bromoform	ug/L	50	48.2	96	70-131	
Bromomethane	ug/L	50	37.2	74	30-177	v3
Carbon tetrachloride	ug/L	50	43.5	87	70-130	
Chlorobenzene	ug/L	50	51.5	103	70-130	
Chloroethane	ug/L	50	38.7	77	46-131	
Chloroform	ug/L	50	42.1	84	70-130	
Chloromethane	ug/L	50	39.0	78	49-130	
cis-1,2-Dichloroethene	ug/L	50	41.3	83	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.6	95	70-130	
Dibromochloromethane	ug/L	50	56.0	112	70-130	
Dibromomethane	ug/L	50	44.7	89	70-130	
Dichlorodifluoromethane	ug/L	50	41.4	83	52-134	
Diisopropyl ether	ug/L	50	41.3	83	70-131	
Ethylbenzene	ug/L	50	50.4	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	56.2	112	70-131	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	44.2	88	70-130	
Methylene Chloride	ug/L	50	39.0	78	68-130	
Naphthalene	ug/L	50	53.6	107	70-133	
o-Xylene	ug/L	50	53.1	106	70-130	
p-Isopropyltoluene	ug/L	50	54.3	109	70-130	
Styrene	ug/L	50	54.1	108	70-130	
Tetrachloroethene	ug/L	50	51.5	103	70-130	
Toluene	ug/L	50	42.2	84	70-130	
trans-1,2-Dichloroethene	ug/L	50	43.0	86	70-130	
trans-1,3-Dichloropropene	ug/L	50	45.1	90	70-130	
Trichloroethene	ug/L	50	47.3	95	70-130	
Trichlorofluoromethane	ug/L	50	43.9	88	61-130	
Vinyl acetate	ug/L	100	104	104	70-140	
Vinyl chloride	ug/L	50	39.6	79	59-142	
Xylene (Total)	ug/L	150	157	105	70-130	
1,2-Dichloroethane-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			93	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3084192 3084193

Parameter	Units	92507939013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	21.1	21.2	105	106	70-135	1	30	
1,1,1-Trichloroethane	ug/L	5.8	20	20	29.6	29.5	119	118	70-148	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.9	19.8	99	99	70-131	0	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	21.2	100	106	70-136	5	30	
1,1-Dichloroethane	ug/L	11.3	20	20	32.5	32.9	106	108	70-147	1	30	
1,1-Dichloroethene	ug/L	46.9	20	20	66.1	68.9	96	110	70-158	4	30	
1,1-Dichloropropene	ug/L	ND	20	20	22.8	22.1	114	110	70-149	3	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	19.7	21.6	99	108	68-140	9	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	20.1	19.9	101	99	67-137	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	20.1	21.7	101	109	70-139	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	23.2	21.6	116	108	69-136	7	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20.8	20.8	104	104	70-137	0	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.9	20.7	105	103	70-133	1	30	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	20.3	100	99	67-138	1	30	
1,2-Dichloropropane	ug/L	ND	20	20	21.5	21.5	107	107	70-138	0	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.2	20.7	101	104	70-133	2	30	
1,3-Dichloropropane	ug/L	ND	20	20	21.5	21.1	108	105	70-136	2	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	21.1	20.9	106	104	70-133	1	30	
2,2-Dichloropropane	ug/L	ND	20	20	24.3	23.8	121	119	52-155	2	30	
2-Butanone (MEK)	ug/L	ND	40	40	42.0	40.8	105	102	61-147	3	30	
2-Chlorotoluene	ug/L	ND	20	20	20.7	20.9	103	105	70-141	1	30	
2-Hexanone	ug/L	ND	40	40	41.6	40.5	104	101	67-139	3	30	
4-Chlorotoluene	ug/L	ND	20	20	20.7	20.7	103	104	70-135	0	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	39.4	39.1	98	98	67-136	1	30	
Acetone	ug/L	ND	40	40	41.6	40.6	104	101	55-159	2	30	
Benzene	ug/L	ND	20	20	21.1	21.4	106	107	67-150	1	30	
Bromobenzene	ug/L	ND	20	20	21.5	21.0	107	105	70-134	2	30	
Bromochloromethane	ug/L	ND	20	20	21.6	20.9	108	104	70-146	3	30	
Bromodichloromethane	ug/L	ND	20	20	19.6	19.7	98	99	70-138	0	30	
Bromoform	ug/L	ND	20	20	18.7	18.9	94	94	57-138	1	30	
Bromomethane	ug/L	ND	20	20	17.0	17.4	85	87	10-200	3	30	
Carbon tetrachloride	ug/L	ND	20	20	21.9	23.0	110	115	70-147	5	30	
Chlorobenzene	ug/L	ND	20	20	20.2	20.3	101	102	70-137	1	30	
Chloroethane	ug/L	ND	20	20	20.9	20.2	105	101	51-166	4	30	
Chloroform	ug/L	ND	20	20	21.6	21.0	108	105	70-144	3	30	
Chloromethane	ug/L	ND	20	20	17.6	17.0	88	85	24-161	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.5	20.6	102	103	67-148	0	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	21.2	21.5	106	107	70-142	1	30	
Dibromochloromethane	ug/L	ND	20	20	20.5	20.6	103	103	68-138	0	30	
Dibromomethane	ug/L	ND	20	20	20.3	20.9	101	105	70-134	3	30	
Dichlorodifluoromethane	ug/L	ND	20	20	16.7	16.7	83	83	43-155	0	30	
Diisopropyl ether	ug/L	ND	20	20	18.9	18.7	95	94	65-146	1	30	
Ethylbenzene	ug/L	ND	20	20	19.9	20.5	99	103	68-143	3	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	21.6	23.4	108	117	62-151	8	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3084192 3084193

Parameter	Units	92507939013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	ND	40	40	40.7	41.8	102	104	53-157	3	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	21.0	21.0	102	102	59-156	0	30	
Methylene Chloride	ug/L	ND	20	20	20.0	20.0	100	100	64-148	0	30	
Naphthalene	ug/L	ND	20	20	20.3	21.1	102	106	57-150	4	30	
o-Xylene	ug/L	ND	20	20	20.6	20.7	103	104	68-143	1	30	
p-Isopropyltoluene	ug/L	ND	20	20	21.1	21.9	105	110	70-141	4	30	
Styrene	ug/L	ND	20	20	20.3	20.7	102	104	70-136	2	30	
Tetrachloroethene	ug/L	ND	20	20	19.7	20.9	98	104	70-139	6	30	
Toluene	ug/L	ND	20	20	20.7	21.0	104	105	47-157	1	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.6	21.7	108	108	70-149	0	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	21.4	22.0	107	110	70-138	3	30	
Trichloroethene	ug/L	ND	20	20	22.0	21.0	110	105	70-149	5	30	
Trichlorofluoromethane	ug/L	ND	20	20	19.4	19.3	97	97	61-154	0	30	
Vinyl acetate	ug/L	ND	40	40	43.4	42.8	109	107	48-156	1	30	IK
Vinyl chloride	ug/L	ND	20	20	18.0	18.2	90	91	55-172	1	30	
Xylene (Total)	ug/L	ND	60	60	61.3	62.5	102	104	66-145	2	30	
1,2-Dichloroethane-d4 (S)	%						96	97	70-130			
4-Bromofluorobenzene (S)	%						100	101	70-130			
Toluene-d8 (S)	%						100	101	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 582772
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939001, 92507939003, 92507939004, 92507939005, 92507939006, 92507939007

METHOD BLANK: 3081850 Matrix: Water
Associated Lab Samples: 92507939001, 92507939003, 92507939004, 92507939005, 92507939006, 92507939007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	11/24/20 16:00	
1,2-Dichloroethane-d4 (S)	%	97	70-130	11/24/20 16:00	
Toluene-d8 (S)	%	92	66-133	11/24/20 16:00	

LABORATORY CONTROL SAMPLE: 3081851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	18.8	94	70-130	
1,2-Dichloroethane-d4 (S)	%			99	70-130	
Toluene-d8 (S)	%			92	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081852 3081853

Parameter	Units	92507939007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	ND	20	20	18.4	19.6	92	98	64-141	6	30	
1,2-Dichloroethane-d4 (S)	%						102	100	70-130		30	
Toluene-d8 (S)	%						92	91	66-133		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 582773
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939008, 92507939010, 92507939011, 92507939012, 92507939013

METHOD BLANK: 3081855 Matrix: Water
Associated Lab Samples: 92507939008, 92507939010, 92507939011, 92507939012, 92507939013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	11/24/20 16:19	
1,2-Dichloroethane-d4 (S)	%	96	70-130	11/24/20 16:19	
Toluene-d8 (S)	%	92	66-133	11/24/20 16:19	

LABORATORY CONTROL SAMPLE: 3081856

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	20.5	102	70-130	
1,2-Dichloroethane-d4 (S)	%			96	70-130	
Toluene-d8 (S)	%			92	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081857 3081858

Parameter	Units	92507939013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	41.5	20	20	64.4	62.3	115	104	64-141	3	30	
1,2-Dichloroethane-d4 (S)	%						103	98	70-130		30	
Toluene-d8 (S)	%						93	91	66-133		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 582774
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92507939002

METHOD BLANK: 3081862 Matrix: Water
Associated Lab Samples: 92507939002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	11/25/20 04:16	
1,2-Dichloroethane-d4 (S)	%	99	70-130	11/25/20 04:16	
Toluene-d8 (S)	%	91	66-133	11/25/20 04:16	

LABORATORY CONTROL SAMPLE: 3081863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	20.2	101	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
Toluene-d8 (S)	%			93	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3081864 3081865

Parameter	Units	92507748001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	ND	20	20	20.1	20.6	99	101	64-141	2	30	
1,2-Dichloroethane-d4 (S)	%						98	101	70-130		30	
Toluene-d8 (S)	%						93	92	66-133		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507939

QC Batch: 583085
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507939009, 92507939014, 92507939015, 92507939016, 92507939017

METHOD BLANK: 3083365 Matrix: Water
Associated Lab Samples: 92507939009, 92507939014, 92507939015, 92507939016, 92507939017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	11/25/20 15:42	
1,2-Dichloroethane-d4 (S)	%	100	70-130	11/25/20 15:42	
Toluene-d8 (S)	%	89	66-133	11/25/20 15:42	

LABORATORY CONTROL SAMPLE: 3083366

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	22.9	115	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
Toluene-d8 (S)	%			92	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3083367 3083368

Parameter	Units	92508101002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	187	80	80	289	296	128	137	64-141	2	30	
1,2-Dichloroethane-d4 (S)	%						97	96	70-130		30	
Toluene-d8 (S)	%						93	93	66-133		30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Kop Flex
Pace Project No.: 92507939

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
IK	The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Kop Flex
Pace Project No.: 92507939

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92507939001	**DUP-112320**	EPA 8260D	582948		
92507939002	**MW-24D**	EPA 8260D	583280		
92507939003	**MW-35D**	EPA 8260D	582948		
92507939004	**MW-34D**	EPA 8260D	582948		
92507939005	**MW-29D**	EPA 8260D	582948		
92507939006	**MW-30D-273**	EPA 8260D	582948		
92507939007	**MW-30D-413**	EPA 8260D	582948		
92507939008	**MW-33D-295**	EPA 8260D	583280		
92507939009	**MW-33D-235**	EPA 8260D	583045		
92507939010	**MW-32D**	EPA 8260D	583045		
92507939011	**MW-28D**	EPA 8260D	583045		
92507939012	**MW-25D-130**	EPA 8260D	583045		
92507939013	**MW-25D-190 MS/MSD**	EPA 8260D	583280		
92507939014	**MW-31D**	EPA 8260D	583045		
92507939015	**MW-36D**	EPA 8260D	583045		
92507939016	**MW-46D**	EPA 8260D	583045		
92507939017	**TRIP BLANK**	EPA 8260D	583045		
92507939001	**DUP-112320**	EPA 8260D Mod.	582772		
92507939002	**MW-24D**	EPA 8260D Mod.	582774		
92507939003	**MW-35D**	EPA 8260D Mod.	582772		
92507939004	**MW-34D**	EPA 8260D Mod.	582772		
92507939005	**MW-29D**	EPA 8260D Mod.	582772		
92507939006	**MW-30D-273**	EPA 8260D Mod.	582772		
92507939007	**MW-30D-413**	EPA 8260D Mod.	582772		
92507939008	**MW-33D-295**	EPA 8260D Mod.	582773		
92507939009	**MW-33D-235**	EPA 8260D Mod.	583085		
92507939010	**MW-32D**	EPA 8260D Mod.	582773		
92507939011	**MW-28D**	EPA 8260D Mod.	582773		
92507939012	**MW-25D-130**	EPA 8260D Mod.	582773		
92507939013	**MW-25D-190 MS/MSD**	EPA 8260D Mod.	582773		
92507939014	**MW-31D**	EPA 8260D Mod.	583085		
92507939015	**MW-36D**	EPA 8260D Mod.	583085		
92507939016	**MW-46D**	EPA 8260D Mod.	583085		
92507939017	**TRIP BLANK**	EPA 8260D Mod.	583085		

Pace Analytical®	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: INSP

Project #: WO# : 92507939

92507939

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No

Date/Initials Person Examining Contents: 11/24/20

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Thermometer: ☒ IR Gun ID: 92T064 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temp: 1.9, 1.7 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.8, 1.6

USDA Regulated Soil (☒ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☒ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☒ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☒ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☒ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Samples MW-31D, MW-36D, Trip Blank B, MW-46D not present.

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: BV **Date:** 11/30/20

Project Manager SRF Review: BV **Date:** 11/30/20

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project # **WO# : 92507939**

PM: BV Due Date: 12/03/20

CLIENT: 92-WSP

PJ

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																5													
2																6													
3																6													
4																6													
5																6													
6																6													
7																6													
8																6													
9																6													
10																6													
11																5													
12																6													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project # WO# : 92507939

PM: BV Due Date: 12/03/20

CLIENT: 92-WSP

p.2

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																6													
2																6													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: WSP

Project #: WO#: 92507939

PM: BV Due Date: 12/03/20
CLIENT: 92-WSP

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:____

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: MG 11-25-20

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92T064 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 4.7 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 4.6

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	10.
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY Field Data Required? ☐ Yes ☐ No

rec'd MW-33D-235, MW-31D > MW-36D, TripBlank B + MW-46D

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project #

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1	\				\	\	\	\			\		\	\	\	5									\	\			
2	\				\	\	\	\			\		\	\	\	6									\	\			
3	\				\	\	\	\			\		\	\	\	6									\	\			
4	\				\	\	\	\			\		\	\	\	2									\	\			
5	\				\	\	\	\			\		\	\	\	6									\	\			
6	\				\	\	\	\			\		\	\	\										\	\			
7	\				\	\	\	\			\		\	\	\										\	\			
8	\				\	\	\	\			\		\	\	\										\	\			
9	\				\	\	\	\			\		\	\	\										\	\			
10	\				\	\	\	\			\		\	\	\										\	\			
11	\				\	\	\	\			\		\	\	\										\	\			
12	\				\	\	\	\			\		\	\	\										\	\			

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Offsite

CHAIN-OF-CUSTODY RECORD

WSP USA Office Address: 13530 Dulles Technology Dr. Ste 300 Herndon VA

Project Name: Kopflex

WSP USA Contact Name: Molly Long

Project Location: Hanover, MD

WSP USA Contact E-mail: molly.long@wsp.com

Project Number & Task: 31401545.211

WSP USA Contact Phone: 571 232 5045

Sampler(s) Name(s): Molly Long, Elliott Martyniuk

Sampler(s) Signature(s):

No. 010007

Laboratory Name & Location: Pace, NC

Laboratory Project Manager: Bonnie

Requested Turn-Around-Time: [X] Standard [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] ___ HR

Requested Analyses & Preservatives

	Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	VOC, 8260D	1,4 Dioxane 8260D + SIM								Sample Comments
A	DUP-112320	AQ	11/23/2020		12	00	5	X	X								001
A	MW-24D				09	45	6	X	X								002
A	MW-35D				10	25	6	X	X								003
A	MW-34D				10	45	6	X	X								004
A	MW-29D				11	25	6	X	X								005
A	MW-30D-273				11	50	6	X	X								006
A	MW-30D-413				12	00	6	X	X								007
A	MW-33D-295				12	20	6	X	X								008
B	MW-33D-235				12	25	6	X	X								009
B	MW-31D				12	55	6	X	X								014
A	MW-32D				14	15	6	X	X								010
A	MW-28D				14	35	6	X	X								011
B	MW-36D				14	55	6	X	X								015
A	MW-25D-130				15	00	5	X	X								012
A	MW-25D-190				16	00	6	X	X								013

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	11/23/20	1730				FedEx	816045810271
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
			LDH PACE HVL	11/24/20	1100	1	

*Use stop time/date 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)

Offsite

CHAIN-OF-CUSTODY RECORD

WSP USA Office Address	WSP Herndon VA
Project Name	WSP USA Contact Name
Project Location	WSP USA Contact E-mail: Molly.long@wsp.com
Project Number & Task	WSP USA Contact Phone
Sampler(s) Name(s): Molly Long	Sampler(s) Signature(s)

No. 010008 WSP

Laboratory Name & Location

Laboratory Project Manager: Bonnie V

Requested Turn-Around-Time: [X] Standard [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] ___ HR 92307939

	Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	VOC 8260D	1,4 Dioxane 8260D	1,4 Dioxane SIM	Sample Comments
A	MW-25D-190-MS	AQ	11/23/2022	16	00		6	X	X		MS | MSD @13
A	MW-25D-190-MSD	AQ	11/23/2022	16	00		6	X	X		@17
B	Trip Blank B		Laboratory				4	X	X		
B	MW-46D	AQ	11/22/2022	16	40		6	X	X		@16

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	11/23/22	1730				FedEx	816045810271
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
						1	

*Use stop time/date 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)