VIA ELECTRONIC MAIL

February 1, 2021

John Hopkins
Remedial Project Manager
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Mail Code – 3LD10
Philadelphia, PA 19103-2029

Subject: **Quarterly Progress Report No. 17**
Former Kop-Flex Facility Site, Hanover, Maryland
USEPA ID No. MDD043373935
Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA

Dear John:

On behalf of EMERSUB 16, LLC, a subsidiary of Emerson Electric Co., WSP USA, Inc. (WSP) is submitting this quarterly progress report describing the activities conducted in the fourth quarter of calendar year 2020 (October 1st through December 31st) as part of the corrective measures implementation at the former Kop-Flex, Inc. facility property located at 7565 Harmans Road (Site) in Hanover, Maryland. The Site is identical to the area described as the "Facility" in the Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA (Consent Order) for the Site. The report also describes the activities planned for the first quarter of calendar year 2021 (January 1st through March 31st).

This progress report is being submitted to the U.S. Environmental Protection Agency (EPA) pursuant to Section VI.C.3 of the Consent Order. Please note that, in addition to performing the work conducted under the Consent Order, EMERSUB 16 continues to fulfill its remedial obligations under the October 2015 Response Action Plan (RAP) approved by the Maryland Department of the Environment (MDE) Voluntary Cleanup Program, and that EMERSUB 16 copies USEPA on all submittals required under that program.

If you have any questions, please do not hesitate to contact us at 703-709-6500.

Kind regards,

Robert E. Johnson
Director, Geological Sciences

SLB:MML:REJ:rlo
K:\Emerson\Kop-Flex_Reports_Progress Reports\EPA Progress Reports\CM Progress Report 17 Q4 2020\

Encl.

cc: Mr. Stephen Clarke, EMERSUB 16 LLC
Ms. Richelle Hanson, Maryland Department of the Environment

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

Tel.: +1 703 709-6500
Fax: +1 703 709-8505
wsp.com

CERTIFICATION

I certify that the information contained in or accompanying this quarterly progress report is true, accurate, and complete.

As to those portions of this quarterly progress report for which I cannot personally verify their accuracy, I certify under penalty of law that this quarterly report and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature: 

Name: Stephen L. Clarke

Title: President of EMERSUB 16, LLC

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

Tel.: +1 703 709-6500
Fax: +1 703 709-8505
wsp.com

Quarterly Progress Report No. 17

Former Kop-Flex Facility Site

October 2020 through December 2020

Site Name:	Former Kop-Flex Facility
Site Address:	7565 Harmans Road Hanover, Maryland 21077
Consultant:	WSP USA Inc.
Address:	13530 Dulles Technology Drive, Suite 300 Herndon, Virginia 20171
Phone No.:	(703) 709-6500
Project Coordinator:	Eric Johnson
Alternate:	Lisa Kelly

1.0 ACTIVITIES COMPLETED DURING OCTOBER 2020 – DECEMBER 2020 REPORTING PERIOD

1.1 HYDRAULIC CONTAINMENT SYSTEM OPERATION

- The hydraulic containment system (System) operated for 89 of the 92 days during the 4th quarter of 2020, which equates to a 97% run-time efficiency over this 3-month period. System shut-downs were limited to a 2-day period in late October and a single day in early November due to minor issues with the pH adjustment system.

- In addition to the System shut-downs, deep recovery well RW-1D was inoperative from October 17-19 and October 24-28 due to a connection glitch with the variable frequency drive (VFD) that controls the operation of the submersible pump in the well. To explain, following the completion of a resin regeneration, the System briefly shuts down for less than a minute to allow for the reconfiguration of the flow path to bring the regenerated vessel back into operation. After completion of the resin regeneration process on October 17th, the RW-1D pump failed to re-start due to a temporary irregularity with the VFD for this well. The well resumed pumping on October 19th after a manual reset of the VFD, but the VFD glitch recurred following another regeneration on October 24th. The RW-1D well has pumped continuously since the VFD was manually reset a second time on October 28th.

- A total of approximately 8.86 million gallons of impacted groundwater were extracted by the recovery wells and treated by the System during the fourth quarter of 2020, with the combined average withdrawal rate during full-scale operation ranging from 67-72 gallons per minute. To monitor and evaluate concentrations of volatile organic compounds (VOCs) and 1,4-dioxane in the untreated and treated water, samples from both the influent and effluent were sampled and analyzed. An influent water sample was collected for chemical analysis in November, while effluent samples were collected from October through December (effluent).

  - The total concentration of chlorinated VOCs (CVOCs) and 1,4-dioxane for the influent sample was 404 micrograms per liter (µg/L), which is consistent with past sampling data. As of the end of 2020, an estimated total of 361 pounds of CVOCs and 152 pounds of 1,4-dioxane had been recovered from the aquifer system.

  - The monthly effluent samples were submitted for chemical analysis in accordance with State Discharge Permit Number 15-DP-3442 and National Pollutant Discharge Elimination System (NPDES) Permit MD 0069094 issued by the MDE (Discharge Permit). Analysis of the effluent samples indicated non-detect concentrations of VOCs. The analytical results for all monitoring parameters complied with the effluent limitations specified in the Discharge Permit.

- The 1,4-dioxane concentrations in the effluent were typically very low (less than 3 µg/L), although an elevated concentration (43 µg/L) that exceeded the Site cleanup goal of 15 µg/L was detected in the November sample. A thorough assessment of the System operational data did not identify any problems that would have resulted in reduced 1,4-dioxane removal efficiency. Subsequent System effluent samples collected on December 3 and December 15, 2020 had 1,4-dioxane concentrations of 2.0 µg/L and 2.2 µg/L, respectively, which were an order of magnitude below the level in the November sample. Based on evaluation of the System operation and subsequent effluent sample results, the elevated 1,4-dioxane concentration in the November 2020 sample is deemed to represent a short-term anomaly that was probably caused by a brief 'slug' of water with relatively high contaminant concentrations entering the System. WSP and EMERSUB 16 notified the EPA and MDE of the 1,4-dioxane exceedance in the November 2020 discharge sample via electronic mail on January 6, 2021.

- On September 15, 2020, WSP submitted a renewal application for the NPDES permit associated with the System. MDE completed an administrative review of the application package and requested the submittal of additional information in support of the application. As requested, WSP submitted a copy of EPA Form 3510-2C to MDE on October 28, 2020.

1.2 POTENTIAL METALS FOULANT EVALUATION

- Starting in late 2019, WSP and the System operation and maintenance contractor have noted an increase in the loading to the bag filters that remove solids from the groundwater before treatment by the resin to remove CVOCs and 1,4-dioxane. Bag filters are replaced on a monthly basis, unless differential pressure readings indicate the need for more frequent replacements. While the frequency of bag filter replacement was monthly from System startup in 2017 through late 2019, the frequency had steadily increased to weekly by late 2020.

- Based on these observations, System samples were collected on December 15, 2020 at the following locations to assess metal concentrations in the process flow:

  - before the bag filters (VSP-2),

  - after the bag filters and before the first resin vessel (VSP-3),

  - between the resin vessels (T-1200 Lead Ef), and

  - after the resin vessels (Effluent VSP-4)

  Samples were analyzed for total and dissolved aluminum, copper, iron, lead, nickel, and zinc, and hardness to identify potential metal precipitants that could explain the increased load to the System bag filters and/or could contribute to fouling of the resin media. A copy of the certified laboratory analytical report for the samples is included in Enclosure A.

  The analytical results did not identify any metals in groundwater as potential System foulants (Table 1). Moreover, concentrations of dissolved and total aluminum in the effluent sample were non-detect, whereas those in the three upstream samples ranged from 120-185 µg/L for dissolved aluminum and 126-182 µg/L for total aluminum. These results indicate that the increased loading of the bag filters is likely due to higher levels of suspended sediment/particulates in the extracted groundwater entering the treatment system. Aluminum tends to remain dissolved in water at low and high pH but will precipitate out of solution within intermediate pH ranges. It is believed that the addition of caustic soda for pH adjustment of the System effluent causes aluminum to "plate out" of the treated groundwater in the effluent piping with no impact to System performance.

1.3 GROUNDWATER LEVEL MONITORING

- Groundwater level monitoring is conducted semi-annually to gather data to evaluate the hydraulic response to remedial pumping in both the shallow (unconfined) and deep (confined) portions of the Lower Patapsco aquifer at the Site. During the reporting period, water level measurements were collected from monitoring wells and recovery well piezometers the week of November 22, 2020, as part of the semi-annual groundwater monitoring event. The data for this and previous measurement rounds is provided in Table 2.

- Contour maps depicting the water table and hydraulic head conditions in the lower portion of the shallow, unconfined zone are provided in Figures 1 and 2, respectively. Evaluation of the hydraulic head distribution and gradients at the groundwater surface and lower portion of the unconfined zone are discussed separately below.

  The water table contour map (Figure 1) indicates the northwestward flow of groundwater in the upper-most portion of the shallow zone across the Site, with the continued presence of a lowering in the groundwater surface around well MW-38R that is associated with pumping from recovery wells RW-1S and RW-2S. In the eastern portion of the Site, a slight mounding, or rise, in the water table continues to exist around wells MW-04 and MW-09. This mounding effect appears to extend a short distance on to the adjacent William-Scotsman, Inc. property. The water table mounding reflects enhanced recharge to the groundwater system associated with the routing of surface water runoff to the storm water management area (SWMA) located in the east-central portion of the Site. The enhanced infiltration of runoff in this SWMA, compared to the surrounding area, causes the localized increase in the water table elevation.

  As with previous measurement rounds, the most pronounced head changes (i.e., drawdown) occurred within the permeable sand deposits comprising the lower portion of the shallow zone, with a well-developed cone of depression in the piezometric surface centered around the shallow recovery well RW-2S and extending to the north toward recovery well RW-1S and monitoring well MW-43 (Figure 2). Based on the head contours, groundwater in the southeast portion of the Site flows in a generally westward direction toward the recovery wells. The groundwater inflow area for the shallow recovery well system encompasses the inferred width of the CVOC and 1,4-dioxane contaminant plumes at the Site.

- The potentiometric surface contour map for the deep, confined portion of the Lower Patapsco aquifer generated from the November 2020 water level data is provided in Figure 3. The hydraulic head distribution shows the continued existence of a slightly elongated depression, or lowering, in the potentiometric surface along the southern property boundary in response to groundwater withdrawals from the two deep recovery wells, RW-1D and RW-2D. Evaluation of the head distribution indicates drawdown of the potentiometric surface extending south onto the adjoining William Scotsman property. The decline in the head caused by the pumping at RW-1D and RW-2D results in the movement of groundwater toward these extraction wells. The groundwater inflow area in response to the groundwater pumping encompasses the inferred width of the deep contaminant plumes at the Site.

1.4 GROUNDWATER QUALITY MONITORING

- In accordance with the Groundwater Monitoring Plan, groundwater quality samples were collected from the shallow and deep recovery wells and the onsite monitoring wells identified for semi-annual sampling under the monitoring program. Samples from the shallow and deep monitoring wells were collected using HydraSleeve™ passive samplers, which were deployed to the same depths as previous monitoring events. Groundwater samples were obtained by carefully removing the HydraSleeve™ sampler from the well and decanting a representative portion of the collected water into the laboratory-supplied containers. If a sufficient amount of groundwater remained in the HydraSleeve™ sampler after sample collection, selected field parameters, including temperature, pH, oxidation reduction potential, specific conductivity, dissolved oxygen, and turbidity, were measured using a water quality meter. For the recovery wells, the samples were collected directly from an in-line sampling port located at each well-head. All water samples were submitted to the Pace Analytical Services laboratory in Huntersville, North Carolina, and analyzed for VOCs using EPA SW-846 Test Method 8260D and 1,4-dioxane using modified EPA Test Method 8260D with

selected ion monitoring. All samples were collected in Late November 2020 with the exception of MW-16D and MW-42. These monitoring wells were sampled in early December 2020 and early January 2021, respectively, due to well access issues.

- Analytical results for the site-related CVOCs and 1,4-dioxane are summarized in Table 3 for the monitoring well samples and Table 4 for the recovery well discharge samples. Copies of the certified laboratory analytical reports for the samples are included in Enclosure B. Historical (December 2016 to present) data for the monitoring well samples are provided in Table 5. The following sections provide an overview of the November 2020 sampling results.

- For the shallow (unconfined) zone, samples of the untreated discharge from recovery wells RW-1S and RW-2S had total concentrations of detectable CVOCs + 1,4-dioxane of 857.8 µg/l and 437 µg/l, respectively (Figure 4; Table 4). The results for these recovery wells showed a decrease in contaminant levels in the extracted groundwater compared to previous sampling data. As with the historical data, the total CVOC + 1,4-dioxane concentration in the RW-3S sample remained lower relative to the other shallow recovery wells, with only 1,1-dichloroethane (DCA) (2.8 µg/l) detected at a concentration slightly above the Site Groundwater Cleanup Standards. The CVOC and 1,4-dioxane concentrations in the groundwater samples from the shallow zone monitoring wells are similar to levels detected in the May 2020 samples. The only exceptions were increases in the site-related CVOC concentration in the MW-16 sample and 1,4-dioxane in the MW-04 sample, and a slight decrease in CVOC and 1,4-dioxane levels in the sample from well MW-43 (Figure 5).

- In the deep recovery well samples, 1,1-DCA, 1,1-dichloroethene (DCE), and 1,4-dioxane in the untreated water remain at concentrations above the Site Groundwater Cleanup Standards (Table 4). The sample results indicate higher levels of chlorinated CVOCs (1,1,1-trichloroethane and degradation products) in the discharge from well RW-1D (311.9 µg/l) in the southwestern portion of the Site compared to RW-2D (223.4 µg/l) located near the southeastern corner. In the deep monitoring well samples, the chlorinated VOC and 1,4-dioxane concentrations for the November 2020 samples are generally similar to levels detected in the May 2020 samples (Figure 6). The presence of constituent concentrations at or below the applicable cleanup levels at the MW-22D and MW-40D locations, together with the inferred capture area indicated by the potentiometric surface contours, indicates the groundwater contaminant plumes in the deep confined portion of the aquifer are being contained as a result of pumping from the deep recovery wells in the southern part of the Site. The sample from monitoring well MW-22D had a 1,1-DCE detection of 7.1 µg/l, which is slightly above the Site Groundwater Cleanup Standard of 7 µg/l. Future samples from this well will be monitored to determine if the eastern boundary of the groundwater deep contaminant plume is defined in the southern portion of the Site.

2.0 PLANNED ONSITE ACTIVITIES FOR THE FIRST QUARTER OF 2021

- Continue with the full-scale System operation, including the collection and assessment of System data to evaluate operational performance, and conduct regular and as needed maintenance activities to maximize System performance and run-time.

- Continue with the evaluation of pre-treatment technologies that could remove natural organic carbon/matter from the influent, thereby preventing fouling of the resin media. The next step in this evaluation will involve the completion of a small-scale field treatability test using the ion exchange technology.

- Complete a regeneration reset of the System resin vessels, which involves shutting down the System for two days to regenerate both resin vessels, and then resuming System operation. This process will minimize potential contaminant pre-loading of the second (lag) resin vessel during normal operation and thus help prevent possible break-through of 1,4-dioxane.

- Conduct the required effluent monitoring and monthly reporting pursuant to the State Discharge/NPDES Permit.

Given the ongoing coronavirus pandemic, it is possible that planned field activities could be delayed and re-scheduled to ensure conformance with government-issued directives and to address potential health concerns raised by the current Site operator – Catalent

Cell & Gene Therapy. EMERSUB 16 will coordinate Site activities with EPA and MDE to the extent possible to avoid any delays or disruptions regarding the completion of these field tasks.

3.0 KEY PERSONNEL/FACILITY CHANGES

There were no changes to key project personnel during the reporting period.

FIGURES

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

TREATMENT EQUIPMENT BUILDING

NORTH WAREHOUSE

SOUTH WAREHOUSE

MW-03

MW-43

MW-09
113.87

MW-39

MW-38R
106.15

RW-1S

MW-42

MW-18

RW-2S

MW-5R
107.66

RW-3S

MW-16

MW-44

MW-01
114.22

MW-45
113.11

MW-20

MW-04
113.55

107 108 109 110 111 112 113 114

N

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- SHALLOW EXTRACTION WELL
- 107.76 GROUNDWATER SURFACE ELEVATION (FEET MSL)
- GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW PATH

0 140 280
SCALE IN FEET

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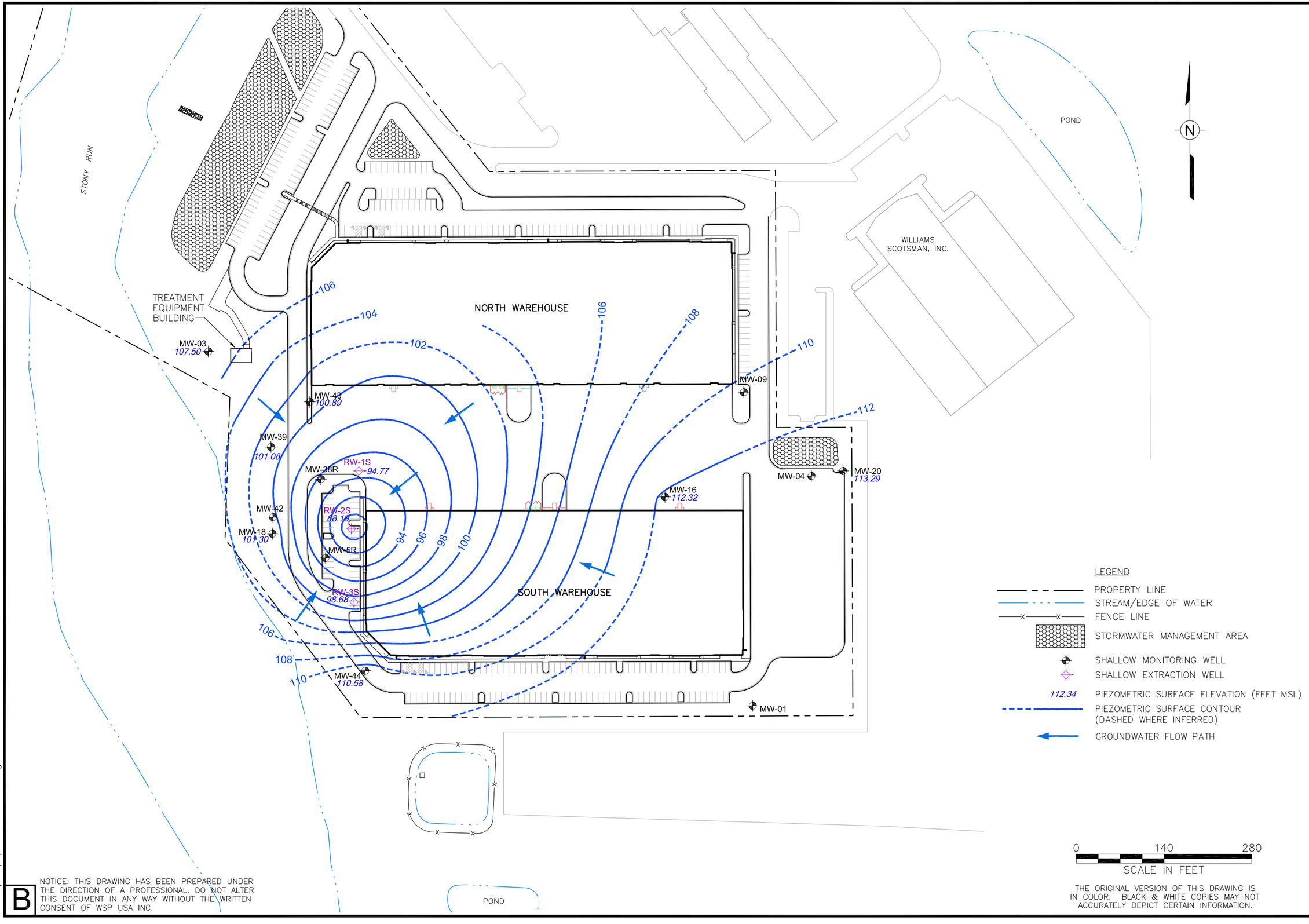
Checked: MML 1/12/2021
Approved: RPD
DWG Name: 314V1545.010-063

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

FIGURE 1

WATER TABLE CONTOUR MAP
(NOVEMBER 2020)

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



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

FIGURE 2

PIEZOMETRIC SURFACE CONTOUR MAP FOR THE LOWER PORTION OF THE SHALLOW ZONE OF THE LOWER PATASPCO AQUIFER (NOVEMBER 2020)

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

MW-46D
87.05

MW-27D
86.58

STONY RUN

POND

WILLIAMS
SCOTSMAN, INC.

MW-23D
85.98

NORTH WAREHOUSE

TREATMENT
EQUIPMENT
BUILDING

MW-16D

MW-40D
83.13

SOUTH WAREHOUSE

MW-41D

MW-22D
82.30

MW-21D
75.93

RW-1D

RW-2D

MW-01D
69.49

MW-24D
76.08

POND

86
84
82
80
78
72
74
76

N

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- DEEP MONITORING WELL
- DEEP EXTRACTION WELL
- 83.13 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW PATH

0 140 280
SCALE IN FEET

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Approved: PGD
DWG Name: 314V1545.010-062

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

FIGURE 3

POTENTIOMETRIC SURFACE CONTOUR MAP
FOR THE DEEPER PORTION OF THE
LOWER PATAPSCO AQUIFER (NOVEMBER 2020)

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

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VERIZON

MW-46D

MW-27D

STONY RUN

POND

MW-23D

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

MW-03

TREATMENT EQUIPMENT BUILDING

MW-43

MW-09

MW-39

MW-45

MW-04

MW-20

RW-1S

MW-38R

MW-16

MW-16D

MW-42

MW-18

RW-2S

MW-5R

MW-40D

SOUTH WAREHOUSE

RW-3S

MW-22D

MW-44

MW-41D

MW-01D

MW-21D

RW-1D

RW-2D

MW-01

MW-24D

RW-1S	5/13/20	11/22/20
1,1-DCA	***98.2***	***81.2***
1,2-DCA	3	ND
1,1-DCE	***447***	***344***
1,4-Dioxane	***298***	***351***
1,1,1-TCA	95.7	65.4
TCE	3.2	ND

RW-2S	5/13/20	11/22/20
1,1-DCA	***24.9***	***18.6***
1,2-DCA	ND	ND
1,1-DCE	***140***	***129***
1,4-Dioxane	***99.8***	***97.0***
1,1,1-TCA	***232***	191
TCE	ND	1.4

RW-3S	5/13/20	11/22/20
1,1-DCA	***3.4***	***2.8***
1,2-DCA	ND	ND
1,1-DCE	5.9	4.2
1,4-Dioxane	***17.2***	13.8
1,1,1-TCA	ND	ND
TCE	ND	ND

RW-1D	5/13/20	11/22/20
1,1-DCA	***48.4***	***42***
1,2-DCA	ND	ND
1,1-DCE	***202***	***179***
1,4-Dioxane	***81.8***	***90.9***
1,1,1-TCA	5.1	ND
TCE	ND	ND

RW-2D	5/13/20	11/22/20
1,1-DCA	***21.4***	***17.9***
1,2-DCA	1.6	ND
1,1-DCE	***145***	***131***
1,4-Dioxane	***78.2***	***74.5***
1,1,1-TCA	5.3	5.5
TCE	ND	ND

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

RW-2S	5/13/20	11/22/20
1,1-DCA	***24.9***	***18.6***
1,2-DCA	ND	ND
1,1-DCE	***140***	***129***
1,4-Dioxane	***99.8***	***97.0***
1,1,1-TCA	***232***	191
TCE	ND	1.4

WELL ID
SAMPLE DATE
CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
CONSTITUENT

ND	NON DETECT
J	ESTIMATED CONCENTRATION
1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
TCE	TRICHLOROETHENE

Cleanup Levels	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

0 140 280
SCALE IN FEET

B

Drawn By: EGC
Checked: MML 1/20/2021
Approved: RJG
DWG Name: 314V1545.010-065

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

FIGURE 4
GROUNDWATER RECOVERY WELL RESULTS (2020)

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

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VERIZON

MW-46D

MW-27D

RUN

POND

WILLIAMS SCOTSMAN, INC.

MW-23D

NORTH WAREHOUSE

TREATMENT EQUIPMENT BUILDING

MW-03

MW-43

MW-09

MW-04

MW-45

MW-39

MW-38R

RW-1S

MW-16

MW-16D

MW-04

MW-20

MW-42

RW-2S

MW-18

MW-5R

MW-40D

SOUTH WAREHOUSE

RW-3S

MW-22D

MW-44

MW-41D

MW-01D

MW-21D

RW-1D

RW-2D

MW-01

MW-24D

MW-43	5/12/20	11/22/20
1,1-DCA	***3.8***	***2.9***
1,2-DCA	ND	ND
1,1-DCE	***46.3***	***31.8***
1,4-Dioxane	***49***	***42.7***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-03	5/12/20
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-39	5/12/20	11/22/20
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
TCE	ND	ND

MW-38R	5/12/20	11/22/20
1,1-DCA	***6.2***	***6.5***
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	***40.8***	***40.9***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-42	5/12/20	1/6/21
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	ND
1,4-Dioxane	11.2	13.2
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-18	5/12/20	11/22/20
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
TCE	ND	ND

MW-5R	5/12/20	11/22/20
1,1-DCA	1.8	ND
1,2-DCA	ND	ND
1,1-DCE	1.7	ND
1,4-Dioxane	13.4	2.2
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-44	5/13/20
1,1-DCA	***3***
1,2-DCA	ND
1,1-DCE	4.1
1,4-Dioxane	***17.7***
1,1,1-TCA	11.9
TCE	ND

MW-16	5/13/20	11/22/20
1,1-DCA	***394***	***1,560***
1,2-DCA	ND	ND
1,1-DCE	***571***	***1,130***
1,4-Dioxane	***39.2***	***84.2***
1,1,1-TCA	***487***	***2,060***
TCE	***10.7***	ND

MW-09	5/13/20	11/22/20
1,1-DCA	2.6	2.5
1,2-DCA	ND	ND
1,1-DCE	***50.5***	***56.4***
1,4-Dioxane	***18.7***	***25.7***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-04	5/13/20	11/22/20
1,1-DCA	***58.6***	***62***
1,2-DCA	1.3	1.6
1,1-DCE	***149***	***141***
1,4-Dioxane	***84.6***	***151***
1,1,1-TCA	1.4	ND
TCE	1.2	1.2

MW-20	5/13/20	11/22/20
1,1-DCA	***188***	***205***
1,2-DCA	***7.7***	***7.5***
1,1-DCE	***232***	***272***
1,4-Dioxane	***1,000***	***1,260***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-01	5/14/20
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

Cleanup Levels	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

MW-20	5/13/20	11/22/20
1,1-DCA	***188***	***205***
1,2-DCA	***7.7***	***7.5***
1,1-DCE	***232***	***272***
1,4-Dioxane	***1,000***	***1,260***
1,1,1-TCA	ND	ND
TCE	ND	ND

WELL ID
SAMPLE DATE
CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
CONSTITUENT

ND NON DETECT

1,1-DCA 1,1-DICHLOROETHANE
1,2-DCA 1,2-DICHLOROETHANE
1,1-DCE 1,1-DICHLOROETHENE
1,1,1-TCA 1,1,1-TRICHLOROETHANE
TCE TRICHLOROETHENE

0 140 280
SCALE IN FEET

B

Drawn By: EGC
Checked: MML 1/13/2021
Approved: RJH
DWG Name: 314V1545.010-066

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

FIGURE 5

SAMPLING RESULTS FOR THE MONITORING WELLS SCREENED IN THE SHALLOW UNCONFINED PORTION OF THE LOWER PATAPSCO AQUIFER (2020)

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

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VERIZON

STONY RUN

POND

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

TREATMENT EQUIPMENT BUILDING

MW-27D

MW-27D	
	5/13/20
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-46D

MW-23D

MW-23D		
	5/13/20	11/22/20
1,1-DCA	***35.2***	***26.3***
1,2-DCA	1.8	1.2
1,1-DCE	***142***	***106***
1,4-Dioxane	***112***	***96.7***
1,1,1-TCA	13,6	ND
TCE	ND	ND

MW-03

MW-43

MW-09

MW-39

MW-45

RW-1S

MW-38R

MW-16

MW-16D

MW-04

MW-20

MW-42

MW-18

RW-2S

MW-5R

RW-3S

MW-40D

MW-40D		
	5/12/20	11/22/20
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
TCE	ND	ND

MW-16D		
	5/13/20	12/8/20
1,1-DCA	***29.1***	***25.9***
1,2-DCA	1.9	1.6
1,1-DCE	***145***	***127***
1,4-Dioxane	***130***	***105***
1,1,1-TCA	11.7	10.1
TCE	ND	ND

MW-44

MW-41D

MW-22D

MW-22D		
	5/12/20	11/22/20
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	6.2	***7.1***
1,4-Dioxane	4.6	4.9
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-01D

MW-01

MW-21D

RW-1D

RW-2D

MW-21D		
	5/12/20	11/22/20
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	***13.6***	***7.8***
1,4-Dioxane	7.6	5.1
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-41D	
	5/12/20
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND
TCE	ND

MW-1D		
	5/12/20	11/22/20
1,1-DCA	2.6	***3.1***
1,2-DCA	ND	ND
1,1-DCE	***16.5***	***17.6***
1,4-Dioxane	12.8	***16.9***
1,1,1-TCA	ND	ND
TCE	ND	ND

MW-24D

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- STORMWATER MANAGEMENT AREA
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL

MW-16D		
	5/13/20	11/22/20
1,1-DCA	***29.1***	***25.9***
1,2-DCA	1.9	1.6
1,1-DCE	***145***	***127***
1,4-Dioxane	***130***	***105***
1,1,1-TCA	11.7	10.1
TCE	ND	ND

WELL ID
SAMPLE DATE
CONCENTRATION (ug/l) (BOLD ITALIC EXCEEDS CLEANUP LEVELS)
CONSTITUENT

ND NON DETECT

1,1-DCA 1,1-DICHLOROETHANE
1,2-DCA 1,2-DICHLOROETHANE
1,1-DCE 1,1-DICHLOROETHENE
1,1,1-TCA 1,1,1-TRICHLOROETHANE
TCE TRICHLOROETHENE

Cleanup Levels	
	µg/l
1,1-DCA	2.8
1,2-DCA	5
1,1-DCE	7
1,4-Dioxane	15
1,1,1-TCA	200
TCE	5

0 140 280
SCALE IN FEET

B

Drawn By: EGC
Checked: MML 1/20/2021
Approved: RJG
DWG Name: 314V1545.010-066

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

FIGURE 6

SAMPLING RESULTS FOR THE MONITORING WELLS SCREENED IN THE DEEPER CONFINED PORTION OF THE LOWER PATAPSCO AQUIFER (2020)

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

R:\ACAD\CADD_CLIENT\Emerson\MD_Hanover\31401545.010\CAD\314V1545.010-066.dwg 1/27/2021 4:35 PM USEC01012

TABLES

Table 1

December 2020 Treatment System Metals Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a, b)

Sample ID:	VSP-2	VSP-3	T-1200 Lead Ef	Effluent VSP-4
Sample Location:	After EQ tank & before bag filters	After bag filters & before resin	Between resin vessels	After resin; System discharge
Analyte Name				
Dissolved Metals (µg/L; US EPA Method 200.8)				
Aluminum	129	120	185	100 U
Copper	4.8	4.8	11.7	2.2
Iron	100 U	100 U	100 U	100 U
Lead	1.0 U	1.0 U	1.0 U	1.0 U
Nickel	14.5	14.5	14.8	17.5
Zinc	25.8	26.2	41.1	25.1
Total Metals (µg/L; US EPA Method 200.8)				
Aluminum	135	126	182	100 U
Copper	5.5	5.6	16.4	3.7
Iron	100 U	100 U	100 U	100 U
Lead	1.0 U	1.0 U	1.0 U	1.0 U
Nickel	15.0	14.8	14.8	17.0
Zinc	40.1	24.5	59.5	26.3
Hardness (mg/L; SM 2340B)				
Hardness	7.8	7.8	7.7	8.0

Notes
a/ µg/L = micrograms per liter; mg/L = milligrams per liter; EPA = Environmental Protection Agency; SM = Standard Method; U = non-detect.
b/ All samples were collected on December 15, 2020.

Table 2

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2020) (a)

Well ID	Zone	TOC elevation	12/7/2016 (b)		2/1/2017 (b)		3/21/2017		4/7/2017		4/10/2017		4/13/2017	
			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*
MW-01	Shallow	129.8	NM	-	15.98	113.82	16.16	113.64	15.93	113.87	15.95	113.85	15.94	113.86
MW-03	Shallow	113.6	6.78	106.82	6.83	106.77	6.79	106.81	6.41	107.19	6.76	106.84	6.91	106.69
MW-04	Shallow	124.4	12.28	112.12	11.14	113.26	11.17	113.23	11.05	113.35	11.09	113.31	11.06	113.34
MW-5R	Shallow	123.5	15.87	107.63	13.49	110.01	15.98	107.52	16.15	107.35	16.38	107.12	16.45	107.05
MW-09	Shallow	125.1	10.84	114.26	11.30	113.80	11.51	113.59	11.41	113.69	11.41	113.69	11.51	113.59
MW-16	Shallow	124.0	10.92	113.08	11.12	112.88	11.66	112.34	11.74	112.26	11.81	112.19	11.82	112.18
MW-18	Shallow	125.1	20.77	104.33	20.84	104.26	22.85	102.25	22.85	102.25	23.11	101.99	23.18	101.92
MW-20	Shallow	125.4	NM	-	12.24	113.16	12.5	112.90	12.33	113.07	12.31	113.09	12.3	113.10
MW-38R	Shallow	125.4	15.58	109.82	15.76	109.64	19.64	105.76	19.6	105.80	20.81	104.59	19.81	105.59
MW-39	Shallow	124.6	NM	-	20.96	103.64	22.64	101.96	22.55	102.05	21.86	102.74	23	101.60
MW-42	Shallow	125.9	16.18	109.72	16.26	109.64	19.28	106.62	19.33	106.57	19.52	106.38	19.49	106.41
MW-43	Shallow	122.8	19.25	103.55	19.31	103.49	20.68	102.12	20.31	102.49	20.61	102.19	21.81	100.99
MW-44	Shallow	127.1	14.93	112.17	15.25	111.85	17.7	109.40	17.08	110.02	17.18	109.92	17.35	109.75
MW-45	Shallow	126.7	NM	-	NM	-	14.1	112.62	13.85	112.87	13.85	112.87	13.85	112.87
RW-1S	Shallow	122.9	12.96	109.94	13.17	109.73	12.96	109.94	20.36	102.54	20.6	102.30	20.56	102.34
RW-2S	Shallow	123.5	14.12	109.38	14.02	109.48	28.55	94.95	28.88	94.62	29.81	93.69	29	94.50
RW-3S	Shallow	125.4	14.29	111.11	14.24	111.16	20.34	105.06	23.49	101.91	23.59	101.81	23.69	101.71
MW-1D	Deep	129.4	42.81	86.59	42.22	87.18	56.15	73.25	56.06	73.34	56.22	73.18	56.44	72.96
MW-16D	Deep	124.1	34.91	89.19	34.72	89.38	37.55	86.55	37.6	86.50	38.02	86.08	38.1	86.00
MW-21D	Deep	126.3	37.8	88.50	37.59	88.71	47.12	79.18	47.26	79.04	47.57	78.73	47.61	78.69
MW-22D	Deep	128.9	40.78	88.07	40.49	88.36	43.28	85.57	43.3	85.55	43.59	85.26	43.76	85.09
MW-23D	Deep	125.2	35.14	90.06	34.74	90.46	36.33	88.87	36.29	88.91	36.72	88.48	36.81	88.39
MW-24D	Deep	129.1	46.3	82.80	45.73	83.37	47.44	81.66	47.71	81.39	48	81.10	48.16	80.94
MW-27D	Deep	117.2	29.66	87.54	26.78	90.42	27.73	89.47	27.68	89.52	28.18	89.02	28.3	88.90
MW-40D	Deep	124.1	35.14	88.96	34.94	89.16	37.19	86.91	37.51	86.59	37.98	86.12	37.98	86.12
MW-41D	Deep	127.1	41.98	85.12	41.44	85.66	44.00	83.10	44.06	83.04	44.48	82.62	44.56	82.54
MW-46D	Deep	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
RW-1D	Deep	126.9	38.53	88.37	38.19	88.71	58.69	68.21	59.02	67.88	59.06	67.84	59.02	67.88
RW-2D	Deep	127.4	42.31	85.09	41.62	85.78	68.82	58.58	68.51	58.89	68.39	59.01	68.78	58.62

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
b/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 2

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2020) (a)

Well ID	Zone	TOC elevation	4/17/2017		5/1/2017		5/8/2017		8/31/2017		10/25/2017		11/14/2017	
			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*
MW-01	Shallow	129.8	15.90	113.90	15.92	113.88	15.81	113.99	15.49	114.31	NA	NA	14.17	115.63
MW-03	Shallow	113.6	6.90	106.70	6.96	106.64	6.87	106.73	7.59	106.01	NA	NA	7.27	106.33
MW-04	Shallow	124.4	11.13	113.27	10.95	113.45	10.91	113.49	10.66	113.74	NA	NA	10.97	113.43
MW-5R	Shallow	123.5	16.47	107.03	16.60	106.90	16.60	106.90	16.90	106.60	NA	NA	16.78	106.72
MW-09	Shallow	125.1	11.48	113.62	11.41	113.69	11.34	113.76	11.09	114.01	NA	NA	NA	NA
MW-16	Shallow	124.0	12.08	111.92	11.99	112.01	11.81	112.19	11.90	112.10	NA	NA	12.00	112.00
MW-18	Shallow	125.1	23.19	101.91	23.30	101.80	23.28	101.82	24.63	100.47	NA	NA	24.41	100.69
MW-20	Shallow	125.4	13.38	112.02	13.01	112.39	12.24	113.16	12.39	113.01	NA	NA	11.98	113.42
MW-38R	Shallow	125.4	19.84	105.56	19.94	105.46	19.96	105.44	20.16	105.24	NA	NA	19.93	105.47
MW-39	Shallow	124.6	23.01	101.59	23.05	101.55	23.00	101.60	24.51	100.09	NA	NA	23.93	100.67
MW-42	Shallow	125.9	19.55	106.35	19.68	106.22	19.67	106.23	19.95	105.95	NA	NA	19.82	106.08
MW-43	Shallow	122.8	20.92	101.88	21.11	101.69	20.90	101.90	21.73	101.07	NA	NA	21.66	101.14
MW-44	Shallow	127.1	17.23	109.87	17.31	109.79	17.27	109.83	17.18	109.92	NA	NA	17.00	110.10
MW-45	Shallow	126.7	13.75	112.97	13.67	113.05	13.60	113.12	13.20	113.52	NA	NA	13.80	112.92
RW-1S	Shallow	122.9	20.60	102.30	20.80	102.10	20.79	102.11	21.49	101.41	NA	NA	21.98	100.92
RW-2S	Shallow	123.5	29.14	94.36	29.61	93.89	29.74	93.76	32.10	91.40	NA	NA	30.76	92.74
RW-3S	Shallow	125.4	23.73	101.67	24.32	101.08	24.46	100.94	26.20	99.20	NA	NA	28.47	96.93
MW-1D	Deep	129.4	56.37	73.03	56.40	73.00	56.29	73.11	56.70	72.70	58.17	71.23	58.09	71.31
MW-16D	Deep	124.1	37.94	86.16	37.98	86.12	38.08	86.02	41.1	83.00	40.71	83.39	40.63	83.47
MW-21D	Deep	126.3	47.58	78.72	47.54	78.76	47.61	78.69	56.7	69.60	50.61	75.69	50.53	75.77
MW-22D	Deep	128.9	43.73	85.12	43.82	85.03	43.81	85.04	46.71	82.14	46.74	82.11	46.25	82.60
MW-23D	Deep	125.2	36.61	88.59	36.71	88.49	36.77	88.43	39.9	85.30	39.21	85.99	39.04	86.16
MW-24D	Deep	129.1	48.29	80.81	48.35	80.75	48.37	80.73	55.82	73.28	52.15	76.95	51.99	77.11
MW-27D	Deep	117.2	28.03	89.17	28.21	88.99	28.21	88.99	31.11	86.09	30.52	86.68	30.34	86.86
MW-40D	Deep	124.1	37.85	86.25	38.01	86.09	38.04	86.06	41.00	83.10	40.75	83.35	40.50	83.60
MW-41D	Deep	127.1	44.43	82.67	44.61	82.49	44.62	82.48	49.18	77.92	47.94	79.16	47.71	79.39
MW-46D	Deep	124.8	NM	-	NM	-	NM	-	NM	-	NM	-	NM	-
RW-1D	Deep	126.9	59.26	67.64	58.88	68.02	58.99	67.91	60.23	66.67	62.62	64.28	63.62	63.28
RW-2D	Deep	127.4	68.63	58.77	68.70	58.70	68.44	58.96	70.11	57.29	68.90	58.50	68.95	58.45

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
b/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 2

Historical Water Level Measurements in
Onsite Monitoring Wells and Recovery Well Piezometers
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 to November 2020) (a)

Well ID	Zone	TOC elevation	5/30/2018		11/7/2018		5/21/2019		11/19/2019		5/12/2020		11/22/2020	
			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*
MW-01	Shallow	129.8	15.52	114.28	13.99	115.81	13.98	115.82	16.47	113.33	15.67	114.13	15.58	114.22
MW-03	Shallow	113.6	7.17	106.43	6.43	107.17	7.08	106.52	7.02	106.58	6.09	107.51	6.1	107.50
MW-04	Shallow	124.4	10.19	114.21	9.16	115.24	8.80	115.60	11.07	113.33	11.00	113.40	10.85	113.55
MW-5R	Shallow	123.5	15.89	107.61	15.51	107.99	15.74	107.76	16.61	106.89	16.55	106.95	15.84	107.66
MW-09	Shallow	125.1	10.78	114.32	9.16	115.94	9.61	115.49	12.00	113.10	11.57	113.53	11.23	113.87
MW-16	Shallow	124.0	11.76	112.24	10.96	113.04	9.37	114.63	12.43	111.57	11.66	112.34	11.68	112.32
MW-18	Shallow	125.1	23.80	101.30	23.13	101.97	22.97	102.13	21.12	103.98	23.10	102.00	23.80	101.30
MW-20	Shallow	125.4	12.15	113.25	11.74	113.66	10.64	114.76	12.98	112.42	12.57	112.83	12.11	113.29
MW-38R	Shallow	125.4	19.35	106.05	18.67	106.73	19.13	106.27	19.83	105.57	19.03	106.37	19.25	106.15
MW-39	Shallow	124.6	23.72	100.88	23.09	101.51	23.00	101.60	23.94	100.66	23.04	101.56	23.52	101.08
MW-42	Shallow	125.9	19.16	106.74	18.55	107.35	18.91	106.99	19.44	106.46	18.85	107.05	NM	-
MW-43	Shallow	122.8	20.47	102.33	20.60	102.20	21.46	101.34	22.04	100.76	20.98	101.82	21.91	100.89
MW-44	Shallow	127.1	16.32	110.78	15.78	111.32	15.91	111.19	17.24	109.86	16.30	110.80	16.52	110.58
MW-45	Shallow	126.7	12.98	113.74	12.00	114.72	11.75	114.97	14.55	112.17	NM	-	13.61	113.11
RW-1S	Shallow	122.9	22.88	100.02	23.97	98.93	26.42	96.48	28.64	94.26	29.16	93.74	28.13	94.77
RW-2S	Shallow	123.5	28.37	95.13	27.48	96.02	31.16	92.34	31.70	91.80	33.33	90.17	35.31	88.19
RW-3S	Shallow	125.4	26.91	98.49	24.39	101.01	22.10	103.30	23.24	102.16	22.85	102.55	26.72	98.68
MW-1D	Deep	129.4	58.03	71.37	57.22	72.18	56.55	72.85	59.49	69.91	57.17	72.23	59.91	69.49
MW-16D	Deep	124.1	40.37	83.73	39.33	84.77	38.30	85.80	40.99	83.11	38.67	85.43	NM	-
MW-21D	Deep	126.3	50.38	75.92	49.61	76.69	48.38	77.92	50.75	75.55	48.50	77.80	50.37	75.93
MW-22D	Deep	128.9	46.30	82.55	35.31	93.54	44.02	84.83	46.20	82.65	44.05	84.80	46.55	82.30
MW-23D	Deep	125.2	38.87	86.33	37.72	87.48	36.88	88.32	39.40	85.80	37.16	88.04	39.22	85.98
MW-24D	Deep	129.1	50.94	78.16	50.72	78.38	49.67	79.43	51.12	77.98	48.80	80.30	53.02	76.08
MW-27D	Deep	117.2	30.20	87.00	29.17	88.03	28.15	89.05	30.68	86.52	28.64	88.56	30.62	86.58
MW-40D	Deep	124.1	40.44	83.66	39.60	84.50	38.50	85.60	41.16	82.94	38.59	85.51	40.97	83.13
MW-41D	Deep	127.1	47.56	79.54	46.56	80.54	45.42	81.68	48.50	78.60	45.28	81.82	48.65	78.45
MW-46D	Deep	124.8	37.37	87.40	32.65	92.12	35.47	89.30	37.90	86.87	35.73	89.04	37.72	87.05
RW-1D	Deep	126.9	62.75	64.15	62.97	63.93	62.44	64.46	64.86	62.04	NM	-	NM	-
RW-2D	Deep	127.4	69.21	58.19	68.34	59.06	68.19	59.21	71.36	56.04	69.35	58.05	69.72	57.68

a/ Vertical datum is NAVD-88
NM = not measured
TOC = top of casing
NA = not available because the well had not been installed
Light gray shading denotes wells screened in the shallow (unconfined) zone; blue shading denotes wells screened in the deep (confined) zone.
Continuous pumping of the groundwater recovery well system started on March 29, 2017.
Water levels from both shallow and deep recovery wells were measured in piezometers co-located with the wells.
b/ Water level measurements representative of non-pumping conditions in the aquifer system.

Table 3

November 2020 Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

		Shallow Wells									
	Well ID:	**MW-04**	**MW-5R**	**MW-09**	**MW-16**	**MW-18**	**MW-20**	**MW-38R**	**MW-39**	**MW-42**	**MW-43**
	Date Sampled:	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**	**1/6/21**	**11/22/20**
Parameters	**Groundwater Cleanup Standards (µg/L) (b)**										
VOCs											
1,1-Dichloroethane	2.8	**62.0**	1 U	2.5	**1,560**	1 U	**205**	**6.5**	1 U	1 U	**2.9**
1,2-Dichloroethane	5	1.6	1 U	1 U	20 U	1 U	**7.5**	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	**141**	1 U	**56.4**	**1,130**	1 U	**272**	1 U	1 U	1 U	**31.8**
1,4-Dioxane	15 (c)	**151**	2.2	**25.7**	**84.2**	2 U	**1,260**	**40.9**	2 U	13.2	**42.7**
Methyl tert-butyl ether	20	1 U	1 U	1 U	20 U	1 U	2 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	200	1 U	1 U	1 U	**2,060**	1 U	2 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1.2	1 U	1 U	20 U	1 U	2 U	1 U	1 U	1 U	1 U

Table 3

November 2020 Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

		Deep Wells						
	Well ID:	**MW-1D**	**MW-16D**	**Duplicate (d)**	**MW-21D**	**MW-22D**	**MW-23D**	**MW-40D**
	Date Sampled:	**11/22/20**	**12/8/20**	**12/8/20**	**11/22/20**	**11/22/20**	**11/22/20**	**11/22/20**
Parameters	**Groundwater Cleanup Standards (µg/L) (b)**							
VOCs								
1,1-Dichloroethane	2.8	**3.1**	**25.9**	**24.4**	1 U	1 U	**26.3**	1 U
1,2-Dichloroethane	5	1 U	1.6	1.7	1 U	1 U	1.2	1 U
1,1-Dichloroethene	7	**17.6**	**127**	**108**	**7.8**	**7.1**	**106**	1 U
1,4-Dioxane	15 (c)	**16.9**	**105**	**118**	5.1	4.9	**96.7**	2 U
Methyl tert-butyl ether	20	1 U	1 U	1 U	3.0	1 U	1 U	1 U
1,1,1-Trichloroethane	200	1 U	10.1	8.9	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U

a/ U = not detected above the method detection limit; NS = not sampled; VOC = volatile organic compounds; ID = identification.
Bolded values indicate an exceedence of the Groundwater Quality Standards.
All sample concentrations in micrograms per liter (µg/l).
Only detected VOCs are listed.
b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAN
c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.
d/ Duplicate sample listed to the right of the original sample.

Table 4

November 2020 Recovery Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland (a)

		Shallow Wells			Deep Wells	
	Well ID:	**RW-1S**	**RW-2S**	**RW-3S**	**RW-1D**	**RW-2D**
	Date Sampled:	**11/22/2020**	**11/22/2020**	**11/22/2020**	**11/22/2020**	**11/22/2020**
Parameters	**Groundwater Cleanup Standards (µg/L) (b)**					
VOCs						
Chloroethane	2,100	12.8	1 U	1 U	4.0	1 U
1,1-Dichloroethane	2.8	**81.2**	**18.6**	**2.8**	**42.0**	**17.9**
1,1-Dichloroethene	7	**344**	**129**	4.2	**179**	**131**
1,4-Dioxane	15 (c)	**351**	**97.0**	13.8	**90.9**	**74.5**
1,1,1-Trichloroethane	200	65.4	191	1 U	2 U	5.5
Trichloroethene	5	2.5 U	1.4	1 U	2 U	1 U
Vinyl chloride	2	3.4	1 U	1 U	2 U	1 U

a/ U = not detected above the method detection limit; VOC = volatile organic compound; ID = identification.
Bolded values indicate an exceedence of the Groundwater Quality Standards.
All sample concentrations in micrograms per liter (µg/l).
Only detected VOCs are listed.

b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/doc

c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-01	5/14/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U
MW-03	12/8/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.6	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-04	12/7/2016	10.0 U	**259**	10.0 U	**1,020**	10.0 U	**576**	20.0 U	4.0 U	31.7	10.0 U	10.0 U	10.0 U
	5/2/2017	4.0 U	**103**	4.0 U	**459**	4.0 U	**252**	8.0 U	4.0 U	13.0	4.0 U	4.0 U	4.0 U
	11/15/2017	5.0 U	**29.2**	1.0 J	**151**	1.0 U	**121**	**10.5**	0.687 J	4.3	1.0 U	1.4	1.0 U
	5/30/2018	1.0 U	**33.3**	1.0 U	**153**	1.0 U	**92.7**	2.0 U	1.0 U	4.0	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**23.3**	1.0 U	**89.9**	1.0 U	1.0 U	2.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**57.7**	1.1	**142**	1.0 U	**111**	5.0 U	1.0 U	1.7	1.0 U	1.1	1.0 U
	11/19/2019	1.0 U	**45.1**	1.1	**126**	1.0 U	**94.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**58.6**	1.3	**149**	1.0 U	**84.6**	5.0 U	1.0 U	1.4	1.2	1.2	1.0 U
	11/22/2020	1.0 U	**62.0**	1.6	**141**	1.0 U	**151**	5.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
MW-5R	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**16.5**	2.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.4	1.0 U	1.4	1.0 U	**16.5**	2.0 U	1.0 U	2.7	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.6	1.0 U	2.5	1.0 U	11.0	**10.2**	1.0 U	1.7	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.8	1.0 U	2.7	1.0 U	11.5	2.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.3	1.0 U	2.0 U	2.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.6	5.0 U	1.0 U	1.9	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.8	1.0 U	1.7	1.0 U	13.4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-09	12/8/2016	1.0 U	**4.5**	1.0 U	**104**	1.0 U	**95.5**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	**2.9**	1.0 U	**63.8**	1.0 U	**20.8**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	**3.1**	0.4 J	**60.2**	1.0 U	**32.4**	5.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	2.2	1.0 U	**49.2**	1.0 U	**23.4**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**4.5**	1.0 U	**75.9**	1.0 U	**37.4**	2.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**3.6**	1.0 U	**70.8**	1.0 U	**32.8**	5.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	2.6	1.0 U	**48.7**	1.0 U	**24.4**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	2.6	1.0 U	**50.5**	1.0 U	**18.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	2.5	1.0 U	**56.4**	1.0 U	**25.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-16	12/8/2016	200 U	**6,420**	200 U	**26,200**	200 U	**1,450**	400 U	100 U	**4,390**	200 U	200 U	200 U
	5/2/2017	225	**7,910**	100 U	**10,500**	100 U	**971**	200 U	100 U	**8,930**	100 U	100 U	100 U
	11/15/2017	732	**7,110**	**22**	**7,740**	46	**836**	**11**	**18.4**	**5,590**	1.0 U	**69**	**19**
	5/30/2018	249	**6,250**	50 U	**4,690**	50 U	**636**	100 U	50 U	**7,360**	50 U	50 U	50 U
	11/7/2018	275	**7,360**	50 U	**7,800**	50 U	**866**	100 U	50 U	**6,420**	50 U	**74.2**	50 U
	5/22/2019	10 U	**343**	10 U	**1,160**	10 U	**1,230**	50 U	10 U	**216**	10 U	**13.7**	10 U
	11/19/2019	23.4	**608**	10 U	**1,440**	10 U	**81.9**	50 U	10 U	**314**	10 U	**18.3**	10 U
	5/13/2020	10.9	**394**	5 U	**571**	5 U	**39.2**	5 U	5 U	**487**	5 U	**10.7**	5 U
	11/22/2020	20.0 U	**1,560**	20 U	**1,130**	20 U	**84.2**	100 U	20 U	**2,060**	5 U	20.0 U	20 U
MW-18	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**24.9**	5.0 U	1.0 U	1.0 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	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-20	12/9/2016	2.0 U	**99.7**	**5.1**	**173**	2.0 U	**767**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	5/2/2017	2.0 U	**161**	**7.3**	**286**	2.0 U	**967**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**136**	**5.7**	**223**	1.4	**969**	5.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U
	5/30/2018	2.0 U	**115**	**5.5**	**205**	2.0 U	**966**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/7/2018	2.5 U	**145**	**6.3**	**233**	2.5 U	**986**	5.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
	5/21/2019	2.0 U	**157**	**6.5**	**226**	2.0 U	**1,620**	10.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/19/2019	2.0 U	**175**	**7.5**	**244**	2.0 U	**1,220**	10.0 U	2.0 U	2.0 U	2.1	2.0 U	2.0 U
	5/13/2020	2.0 U	**188**	**7.7**	**232**	2.0 U	**1,000**	10.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/22/2020	2.0 U	**205**	**7.5**	**272**	2.0 U	**1,260**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-38R	12/9/2016	1.0 U	**3.8**	1.0 U	1.0 U	1.0 U	**18.3**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.0**	1.0 U	1.0 U	1.0 U	**42.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	**8.3**	1.0 U	1.0 U	1.0 U	**62.5**	**8.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	**4.3**	1.0 U	1.0 U	1.0 U	**40.7**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**6.9**	1.0 U	1.0 U	1.0 U	**39.4**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**4.7**	1.0 U	1.0 U	1.0 U	**43.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**7.7**	1.0 U	1.0 U	1.0 U	**51.5**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	**6.2**	1.0 U	1.0 U	1.0 U	**40.8**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**6.5**	1.0 U	1.0 U	1.0 U	**40.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-39	12/7/2016	1.0 U	1.0 U	1.0 U	1.7	1.0 U	2.5	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.1	1.0 U	3.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.0 U	1.0 U	0.6 J	1.0 U	2.2	5.0 U	1.0 U	1.0 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	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-42	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.8	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.0	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**19.3**	5.0 U	1.0 U	1.0 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	1.0 U	7.4	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.3	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	11.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	1/6/2021	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.2	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-43	12/7/2016	2.0 U	**15.9**	2.1	**171**	2.0 U	**237**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	5/1/2017	2.0 U	**21.3**	2.1	**177**	2.0 U	**206**	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**15.9**	1.3	**159**	1.0 U	**165**	5.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
	5/30/2018	2.0 U	**5.9**	1.0 U	**68**	1.0 U	**57.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**13.8**	1.2	**118**	1.0 U	**107**	2.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U
	5/21/2019	1.0 U	**5.2**	1.0 U	**53.9**	1.0 U	**52.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**4.3**	1.0 U	**48.5**	1.0 U	**55.2**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/12/2020	1.0 U	**3.8**	1.0 U	**46.3**	1.0 U	**49.0**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**2.9**	1.0 U	**31.8**	1.0 U	**42.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-44	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.6**	1.0 U	5.9	1.0 U	**49.1**	2.0 U	1.0 U	27.7	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.4	1.0 U	1.4	1.0 U	8.4	2.0 U	1.0 U	4.9	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**14.9**	1.0 U	**22.4**	1.0 U	**64.4**	5.0 U	1.0 U	74.3	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**3.0**	1.0 U	4.1	1.0 U	**17.7**	5.0 U	1.0 U	11.9	1.0 U	1.0 U	1.0 U
MW-1D	1/2/2017	2.0 U	**72**	4.7	**375**	2.0 U	**236**	4.0 U	2.5 U	37.5	2.0 U	2.0 U	2.0 U
	5/3/2017	2.5 U	**105**	**5.7**	**407**	2.5 U	**329**	5.0 U	2.5 U	37.1	2.5 U	2.5 U	2.5 U
	11/15/2017	5.0 U	**80**	3.8	**277**	0.6 J	**243**	5.0 U	0.519 J	29.8	0.8 J	1.7	1 U
	5/30/2018	1.0 U	**14.9**	1.0 U	**71.4**	1.0 U	**64.4**	2.0 U	1.0 U	5.3	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**7.1**	1.0 U	**38.8**	1.0 U	2.0 U	2.0 U	1.0 U	3.3	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	2.1	1.0 U	**13.7**	1.0 U	12.8	5.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**3.4**	1.0 U	**17.7**	1.0 U	**17.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	2.6	1.0 U	**16.5**	1.0 U	12.8	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**3.1**	1.0 U	**17.6**	1.0 U	**16.9**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-16D	12/8/2016	2.0 U	**56.6**	2.9	**254**	2.0 U	**202**	4.0 U	2.0 U	21	2.0 U	2.0 U	2.0 U
	5/2/2017	2.0 U	**43.7**	2.9	**235**	2.0 U	**182**	4.0 U	2.0 U	16.4	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**29.7**	1.9	**179**	0.3 J	**192**	**10.0**	1.0 U	15.1	0.5 J	0.9 J	1.0 U
	5/30/2018	1.0 U	**26.4**	1.6	**180**	1.0 U	**153**	2.0 U	1.0 U	10.3	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**27.5**	1.8	**161**	1.0 U	**158**	2.0 U	1.0 U	12.5	1.0 U	1.0 U	1.0 U
	5/22/2019	1.0 U	**28.5**	2.1	**172**	1.0 U	**148**	5.0 U	1.0 U	14.5	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**25.6**	1.7	**133**	1.0 U	**140**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**29.1**	1.9	**145**	1.0 U	**130**	5.0 U	1.0 U	11.7	1.0 U	1.0 U	1.0 U
	12/8/2020	1.0 U	**25.9**	1.6	**127**	1.0 U	**105**	5.0 U	1.0 U	10.1	1.0 U	1.0 U	1.0 U

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-21D	12/16/2016	1.0 U	2.6	1.0 U	**23.4**	1.0 U	**18.6**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**6.9**	1.4	**111**	1.0 U	**57.5**	2.0 U	1.0 U	2.3	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	2.0	1.0 U	**14.4**	1.0 U	**18.5**	5.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0	1.0 U	**38.8**	1.0 U	**32.2**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	**30.0**	1.0 U	**18.0**	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	**9.9**	1.0 U	8.4	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	4.1	1.0 U	4.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	**13.6**	1.0 U	7.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	**7.8**	1.0 U	5.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-22D	12/7/2016	1.0 U	2.5	1.0 U	**31.5**	1.0 U	**24.5**	2.0 U	1.0 U	4.1	1.0 U	1.0 U	1.0 U
	5/2/2017	1.0 U	2.5	1.0 U	**36.9**	1.0 U	**24.6**	2.0 U	1.0 U	3.7	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	1.72	1.0 U	**24.4**	1.0 U	**19.6**	5.0 U	1.0 U	2.8	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	**13.1**	1.0 U	7.9	2.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	**9.7**	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	6.3	1.0 U	5.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	5.6	1.0 U	4.9	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	6.2	1.0 U	4.6	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	**7.1**	1.0 U	4.9	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-23D	1/2/2017	2.0 U	**26.4**	2.0 U	**140**	2.0 U	**151**	**8.3**	1.0 U	17.0	2.0 U	2.0 U	2.0 U
	5/1/2017	2.0 U	**39.1**	2.4	**208**	2.0 U	**177**	4.0 U	2.0 U	19.9	2.0 U	2.0 U	2.0 U
	11/15/2017	5.0 U	**31.1**	1.9	**179**	0.3 J	**158**	5.0 U	0.417 J	19.3	0.4 J	0.9 J	1.0 U
	5/30/2018	1.0 U	**30.5**	1.6	**172**	1.0 U	**148**	2.0 U	1.0 U	14.8	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	**36.2**	1.9	**185**	1.0 U	**146**	2.0 U	1.0 U	17.0	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	**18.5**	1.2	**96.4**	1.0 U	**70.7**	5.0 U	1.0 U	8.6	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	**22.7**	1.4	**107**	1.0 U	**109**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	**35.2**	1.8	**142**	1.0 U	**112**	5.0 U	1.0 U	13.6	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	**26.3**	1.2	**106**	1.0 U	**96.7**	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-27D	12/7/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.6	2.0 U	1.0 U	1.0 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	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/13/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 5

Historical Monitoring Well Sampling Results
Former Kop-Flex Facility Site
Hanover, Maryland
(December 2016 - January 2021) (a)

Well ID	Sample Date	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,4-Dioxane	Methylene Chloride	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl chloride
Groundwater Cleanup Standards (b)		2,100	2.8	5	7	70	15 (c)	5	5	200	5	5	2
MW-40D	12/9/2016	1.0 U	**2.9**	1.0 U	**18.1**	1.0 U	9.4	2.0 U		1.0 U	1.0 U	1.0 U	1.0 U
	5/1/2017	1.0 U	**3.1**	1.0 U	**17.4**	1.0 U	8.5	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/15/2017	5.0 U	0.9 J	1.0 U	5.2	1.0 U	5.2	**9.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	2.9	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/7/2018	1.0 U	1.0 U	1.0 U	4.4	1.0 U	2.7	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/19/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	11/22/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MW-41D	12/16/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.4	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/30/2018	1.0 U	1.0 U	1.0 U	1.1	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/21/2019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	5/18/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

a/ U = not detected above the method detection limit; ID = identification.
Bolded values indicate an exceedence of the Groundwater Quality Standards.
All sample concentrations in micrograms per liter (µg/l).

b/ All cleanup standards, except for 1,4-dioxane, are equal to the Maryland Generic Numeric Cleanup Standards for Groundwater, Type I and II Aquifers, from the State of Maryland Interim Final Guidance (October 2018). Accessed May 27, 2020: https://mde.maryland.gov/programs/LAND/MarylandBrownfieldVCP/Documents/www.mde.state.md.us/assets/document/M

c/ Numeric cleanup standards from WSP's October 2, 2015, Response Action Plan, Revision 2.

ENCLOSURE A – LABORATORY ANALYTICAL REPORT, DECEMBER 2020 POTENTIAL METALS FOULANT SAMPLING

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

December 22, 2020

Eric Johnson
WSP USA - Herndon
13530 Dulles Technology Dr, Ste 300
Herndon, VA 20171

Reference: PSS Project No: **20121516**
Project Name: Kop-Flex
Project Location: Hanover, MD
Project ID.: 31401545.010/04

Dear Eric Johnson:

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Project number(s) **20121516**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on January 19, 2021, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal
Laboratory Manager

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6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
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Explanation of Qualifiers

Project Name: Kop-Flex
PSS Project No.: 20121516

Project ID: 31401545.010/04

The following samples were received under chain of custody by Phase Separation Science (PSS) on 12/15/2020 at 02:22 pm

PSS Sample ID	Sample ID	Matrix	Date/Time Collected
20121516-001	VSP-2	WASTE WATER	12/15/20 11:40
20121516-002	VSP-3	WASTE WATER	12/15/20 11:50
20121516-003	T-1200 Lead EF	WASTE WATER	12/15/20 11:55
20121516-004	Effluent VSP-4	WASTE WATER	12/15/20 11:30
20121516-005	TB-121520	WATER	12/15/20 14:22

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminates, and part 141.3, for the secondary drinking water contaminates.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

Standard Flags/Abbreviations:

B	A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
C	Results Pending Final Confirmation.
E	The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
Fail	The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
J	The target analyte was positively identified below the reporting limit but greater than the MDL.
MDL	This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
ND	Not Detected at or above the reporting limit.
RL	PSS Reporting Limit.
U	Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

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Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

Sample ID: VSP-2 **Date/Time Sampled: 12/15/2020 11:40** **PSS Sample ID: 20121516-001**
Matrix: WASTE WATER **Date/Time Received: 12/15/2020 14:22**

Dissolved Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**129**	ug/L	100		1	12/17/20	12/17/20 16:18	1051
Copper	**4.8**	ug/L	1.0		1	12/17/20	12/17/20 16:18	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 16:18	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 16:18	1051
Nickel	**14.5**	ug/L	1.00		1	12/17/20	12/17/20 16:18	1051
Zinc	**25.8**	ug/L	20.0		1	12/17/20	12/17/20 16:18	1051

Total Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**135**	ug/L	100		1	12/17/20	12/17/20 18:35	1051
Copper	**5.5**	ug/L	1.0		1	12/17/20	12/17/20 18:35	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 18:35	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 18:35	1051
Nickel	**15.0**	ug/L	1.00		1	12/17/20	12/17/20 18:35	1051
Zinc	**40.1**	ug/L	20.0		1	12/17/20	12/17/20 18:35	1051

Hardness, Total by Calculation Analytical Method: SM 2340B Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Hardness (Ca & Mg)	**7.8**	mg/L	0.66		1	12/17/20	12/17/20 18:35	1051

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Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

Sample ID: VSP-3 **Date/Time Sampled: 12/15/2020 11:50** **PSS Sample ID: 20121516-002**
Matrix: WASTE WATER **Date/Time Received: 12/15/2020 14:22**

Dissolved Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**120**	ug/L	100		1	12/17/20	12/17/20 16:22	1051
Copper	**4.8**	ug/L	1.0		1	12/17/20	12/17/20 16:22	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 16:22	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 16:22	1051
Nickel	**14.5**	ug/L	1.00		1	12/17/20	12/17/20 16:22	1051
Zinc	**26.2**	ug/L	20.0		1	12/17/20	12/17/20 16:22	1051

Total Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**126**	ug/L	100		1	12/17/20	12/17/20 18:49	1051
Copper	**5.6**	ug/L	1.0		1	12/17/20	12/17/20 18:49	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 18:49	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 18:49	1051
Nickel	**14.8**	ug/L	1.00		1	12/17/20	12/17/20 18:49	1051
Zinc	**24.5**	ug/L	20.0		1	12/17/20	12/17/20 18:49	1051

Hardness, Total by Calculation Analytical Method: SM 2340B Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Hardness (Ca & Mg)	**7.8**	mg/L	0.66		1	12/17/20	12/17/20 18:49	1051

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Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

Sample ID: T-1200 Lead EF **Date/Time Sampled: 12/15/2020 11:55** **PSS Sample ID: 20121516-003**
Matrix: WASTE WATER **Date/Time Received: 12/15/2020 14:22**

Dissolved Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**185**	ug/L	100		1	12/17/20	12/17/20 16:26	1051
Copper	**11.7**	ug/L	1.00		1	12/17/20	12/17/20 16:26	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 16:26	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 16:26	1051
Nickel	**14.8**	ug/L	1.00		1	12/17/20	12/17/20 16:26	1051
Zinc	**41.1**	ug/L	20.0		1	12/17/20	12/17/20 16:26	1051

Total Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	**182**	ug/L	100		1	12/17/20	12/17/20 18:53	1051
Copper	**16.4**	ug/L	1.00		1	12/17/20	12/17/20 18:53	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 18:53	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 18:53	1051
Nickel	**14.8**	ug/L	1.00		1	12/17/20	12/17/20 18:53	1051
Zinc	**59.5**	ug/L	20.0		1	12/17/20	12/17/20 18:53	1051

Hardness, Total by Calculation Analytical Method: SM 2340B Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Hardness (Ca & Mg)	**7.7**	mg/L	0.66		1	12/17/20	12/17/20 18:53	1051

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Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

Sample ID: Effluent VSP-4 **Date/Time Sampled: 12/15/2020 11:30** **PSS Sample ID: 20121516-004**
Matrix: WASTE WATER **Date/Time Received: 12/15/2020 14:22**

Dissolved Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	ND	ug/L	100		1	12/17/20	12/17/20 16:30	1051
Copper	**2.2**	ug/L	1.0		1	12/17/20	12/17/20 16:30	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 16:30	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 16:30	1051
Nickel	**17.5**	ug/L	1.00		1	12/17/20	12/17/20 16:30	1051
Zinc	**25.1**	ug/L	20.0		1	12/17/20	12/17/20 16:30	1051

Total Metals (6) Analytical Method: EPA 200.8 Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Aluminum	ND	ug/L	100		1	12/17/20	12/17/20 18:58	1051
Copper	**3.7**	ug/L	1.0		1	12/17/20	12/17/20 18:58	1051
Iron	ND	ug/L	100		1	12/17/20	12/17/20 18:58	1051
Lead	ND	ug/L	1.0		1	12/17/20	12/17/20 18:58	1051
Nickel	**17.0**	ug/L	1.00		1	12/17/20	12/17/20 18:58	1051
Zinc	**26.3**	ug/L	20.0		1	12/17/20	12/17/20 18:58	1051

Hardness, Total by Calculation Analytical Method: SM 2340B Preparation Method: 200.8

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Hardness (Ca & Mg)	**8.0**	mg/L	0.66		1	12/17/20	12/17/20 18:58	1051

1,4-Dioxane by GC/MS - SIM Analytical Method: SW-846 8260 B-Modified Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,4-Dioxane (P-Dioxane)	**2.2**	ug/L	1.0		1	12/22/20	12/22/20 11:35	1011
Surrogate(s)	***Recovery***		***Limits***					
Toluene-D8	*98*	*%*	*80-120*		*1*	*12/22/20*	*12/22/20 11:35*	*1011*

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Certificate of Analysis

Project Name: Kop-Flex
PSS Project No.: 20121516

Sample ID: TB-121520 **Date/Time Sampled: 12/15/2020 14:22** **PSS Sample ID: 20121516-005**
Matrix: WATER **Date/Time Received: 12/15/2020 14:22**

1,4-Dioxane by GC/MS - SIM Analytical Method: SW-846 8260 B-Modified Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,4-Dioxane (P-Dioxane)	ND	ug/L	1.0		1	12/22/20	12/22/20 13:46	1011
Surrogate(s)	***Recovery***		***Limits***					
Toluene-D8	*100*	*%*	*80-120*		*1*	*12/22/20*	*12/22/20 13:46*	*1011*

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Project Name: Kop-Flex

PSS Project No.: 20121516

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

All sample receipt conditions were acceptable.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.

SW-846 8260 B-Modified: 1,4-Dioxane

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Lab Chronology

Project Name: Kop-Flex
PSS Project No.: 20121516

Method	Client Sample ID	Analysis Type	PSS Sample ID	Mtx	Prep Batch	Analytical Batch	Prepared	Analyzed
EPA 200.8	VSP-2	Initial	20121516-001	W	84260	180502	12/17/2020 10:49	12/17/2020 18:35
	VSP-3	Initial	20121516-002	W	84260	180502	12/17/2020 10:49	12/17/2020 18:49
	T-1200 Lead EF	Initial	20121516-003	W	84260	180502	12/17/2020 10:49	12/17/2020 18:53
	Effluent VSP-4	Initial	20121516-004	W	84260	180502	12/17/2020 10:49	12/17/2020 18:58
	84260-1-BKS	BKS	84260-1-BKS	W	84260	180502	12/17/2020 10:49	12/17/2020 18:30
	84260-1-BLK	BLK	84260-1-BLK	W	84260	180502	12/17/2020 10:49	12/17/2020 18:25
	VSP-2 S	MS	20121516-001 S	W	84260	180502	12/17/2020 10:49	12/17/2020 18:39
	VSP-2 SD	MSD	20121516-001 S	W	84260	180502	12/17/2020 10:49	12/17/2020 18:44
EPA 200.8	VSP-2	Initial	20121516-001	W	84264	180497	12/17/2020 12:37	12/17/2020 16:18
	VSP-3	Initial	20121516-002	W	84264	180497	12/17/2020 12:37	12/17/2020 16:22
	T-1200 Lead EF	Initial	20121516-003	W	84264	180497	12/17/2020 12:37	12/17/2020 16:26
	Effluent VSP-4	Initial	20121516-004	W	84264	180497	12/17/2020 12:37	12/17/2020 16:30
	84264-1-BKS	BKS	84264-1-BKS	W	84264	180497	12/17/2020 12:37	12/17/2020 16:01
	84264-1-BLK	BLK	84264-1-BLK	W	84264	180497	12/17/2020 12:37	12/17/2020 15:56
	Millville 001 S	MS	20121506-001 S	W	84264	180497	12/17/2020 12:37	12/17/2020 16:10
	Millville 001 SD	MSD	20121506-001 S	W	84264	180497	12/17/2020 12:37	12/17/2020 16:14
SM 2340B	VSP-2	Initial	20121516-001	W	84260	180503	12/18/2020 12:59	12/17/2020 18:35
	VSP-3	Initial	20121516-002	W	84260	180503	12/18/2020 12:59	12/17/2020 18:49
	T-1200 Lead EF	Initial	20121516-003	W	84260	180503	12/18/2020 12:59	12/17/2020 18:53
	Effluent VSP-4	Initial	20121516-004	W	84260	180503	12/18/2020 12:59	12/17/2020 18:58
SW-846 8260 B-Modified	Effluent VSP-4	Initial	20121516-004	W	84342	180587	12/22/2020 08:48	12/22/2020 11:35
	TB-121520	Initial	20121516-005	W	84342	180587	12/22/2020 08:48	12/22/2020 13:46
	84342-1-BKS	BKS	84342-1-BKS	W	84342	180587	12/22/2020 08:48	12/22/2020 09:43
	84342-1-BLK	BLK	84342-1-BLK	W	84342	180587	12/22/2020 08:48	12/22/2020 11:12
	84342-1-BSD	BSD	84342-1-BSD	W	84342	180587	12/22/2020 08:48	12/22/2020 10:05

Analytical Method: EPA 200.8 Prep Method: E200.8_PREP
Seq Number: 180502 Matrix: Water Date Prep: 12/17/20
MB Sample Id: 84260-1-BLK LCS Sample Id: 84260-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Aluminum	<100	200	196.2	98	85-115	ug/L	
Copper	<1.000	40.00	39.45	99	85-115	ug/L	
Iron	<100	400	372.8	93	85-115	ug/L	
Lead	<1.000	40.00	39.24	98	85-115	ug/L	
Nickel	<1.000	40.00	37.32	93	85-115	ug/L	
Zinc	<20.00	200	191.3	96	85-115	ug/L	

Analytical Method: EPA 200.8 Prep Method: E200.8_PREP
Seq Number: 180497 Matrix: Water Date Prep: 12/17/20
MB Sample Id: 84264-1-BLK LCS Sample Id: 84264-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Flag
Aluminum	<100	200	197.4	99	85-115	ug/L	
Copper	<1.000	40.00	37.84	95	85-115	ug/L	
Iron	<100	400	422.9	106	85-115	ug/L	
Lead	<1.000	40.00	38.04	95	85-115	ug/L	
Nickel	<1.000	40.00	37.07	93	85-115	ug/L	
Zinc	<20.00	200	192.4	96	85-115	ug/L	

Analytical Method: EPA 200.8 Prep Method: E200.8_PREP
Seq Number: 180502 Matrix: Waste Water Date Prep: 12/17/20
Parent Sample Id: 20121516-001 MS Sample Id: 20121516-001 S MSD Sample Id: 20121516-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Flag
Aluminum	134.7	200	306.8	86	307.9	87	70-130	1	25	ug/L	
Copper	5.488	40.00	44.20	97	47.31	105	70-130	8	25	ug/L	
Iron	<100	400	411.6	103	420.2	105	70-130	2	25	ug/L	
Lead	<1.000	40.00	38.27	96	38.63	97	70-130	1	25	ug/L	
Nickel	15.02	40.00	52.21	93	55.63	102	70-130	9	25	ug/L	
Zinc	40.14	200	218.7	89	247	103	70-130	15	25	ug/L	

Analytical Method: SW-846 8260 B-Modified Prep Method: SW5030B
Seq Number: 180587 Matrix: Water Date Prep: 12/22/20
MB Sample Id: 84342-1-BLK LCS Sample Id: 84342-1-BKS LCSD Sample Id: 84342-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Flag
1,4-Dioxane (P-Dioxane)	<1.000	30.00	31.20	104	31.83	106	50-150	2	20	ug/L	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units
Toluene-D8	99		103		102		80-120	%

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Project Name Kop-Flex
PSS Project No.: 20121516

F = RPD exceeded the laboratory control limits
X = Recovery of MS, MSD or both outside of QC Criteria
H= Recovery of BS,BSD or both exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Analytical Method: EPA 200.8
Seq Number: 180497 Matrix: Water
CCV Sample Id: CCV 3 Analyzed Date: 12/17/20 15:37

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	211.3	106	85-115	ug/L	
Copper	40.00	39.48	99	85-115	ug/L	
Iron	400	389	97	85-115	ug/L	
Lead	40.00	42.18	105	85-115	ug/L	
Nickel	40.00	38.40	96	85-115	ug/L	
Zinc	200	197.2	99	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180497 Matrix: Water
CCV Sample Id: CCV 4 Analyzed Date: 12/17/20 16:46

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	202.3	101	85-115	ug/L	
Copper	40.00	39.88	100	85-115	ug/L	
Iron	400	380.9	95	85-115	ug/L	
Lead	40.00	39.66	99	85-115	ug/L	
Nickel	40.00	38.36	96	85-115	ug/L	
Zinc	200	198.1	99	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180497 Matrix: Water
CCV Sample Id: CCV 6 Analyzed Date: 12/17/20 18:11

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	209.5	105	85-115	ug/L	
Copper	40.00	39.29	98	85-115	ug/L	
Iron	400	377.6	94	85-115	ug/L	
Lead	40.00	41.66	104	85-115	ug/L	
Nickel	40.00	38.10	95	85-115	ug/L	
Zinc	200	194.9	97	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180502 Matrix: Water
CCV Sample Id: CCV 6 Analyzed Date: 12/17/20 18:11

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	209.5	105	85-115	ug/L	
Copper	40.00	39.29	98	85-115	ug/L	
Iron	400	377.6	94	85-115	ug/L	
Lead	40.00	41.66	104	85-115	ug/L	
Nickel	40.00	38.10	95	85-115	ug/L	
Zinc	200	194.9	97	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180502 Matrix: Water
CCV Sample Id: CCV 8 Analyzed Date: 12/17/20 19:24

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	202.3	101	85-115	ug/L	
Copper	40.00	39.40	99	85-115	ug/L	
Iron	400	378.3	95	85-115	ug/L	
Lead	40.00	40.31	101	85-115	ug/L	
Nickel	40.00	38.13	95	85-115	ug/L	
Zinc	200	194.9	97	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180502 Matrix: Water
CCV Sample Id: CCV 9 Analyzed Date: 12/17/20 20:39

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
Aluminum	200	201.7	101	85-115	ug/L	
Copper	40.00	38.98	97	85-115	ug/L	
Iron	400	378.5	95	85-115	ug/L	
Lead	40.00	39.26	98	85-115	ug/L	
Nickel	40.00	37.92	95	85-115	ug/L	
Zinc	200	193.2	97	85-115	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180497 Matrix: Water
Parent Sample Id: ICV 1 ICV Sample Id: ICV 1 Analyzed Date: 12/17/20 11:50

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Aluminum	200	203.2	102	90-110	ug/L	
Copper	40.00	39.93	100	90-110	ug/L	
Iron	400	397	99	90-110	ug/L	
Lead	40.00	40.29	101	90-110	ug/L	
Nickel	40.00	38.99	97	90-110	ug/L	
Zinc	200	198.7	99	90-110	ug/L	

Analytical Method: EPA 200.8
Seq Number: 180502 Matrix: Water
Parent Sample Id: ICV 1 ICV Sample Id: ICV 1 Analyzed Date: 12/17/20 11:50

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
Aluminum	200	203.2	102	90-110	ug/L	
Copper	40.00	39.93	100	90-110	ug/L	
Iron	400	397	99	90-110	ug/L	
Lead	40.00	40.29	101	90-110	ug/L	
Nickel	40.00	38.99	97	90-110	ug/L	
Zinc	200	198.7	99	90-110	ug/L	

Analytical Method: SW-846 8260 B-Modified
Seq Number: 175110 Matrix: Water
CCV Sample Id: CCV-01 Analyzed Date: 06/11/20 11:36

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
1,4-Dioxane (P-Dioxane)	30.00	30.40	101	80-120	ug/L	

Surrogate	CCV Result	Limits	Units	Flag
Toluene-D8	99	80-120	%	

Analytical Method: SW-846 8260 B-Modified
Seq Number: 180587 Matrix: Water
CCV Sample Id: CCV-01 Analyzed Date: 12/22/20 09:21

Parameter	Spike Amount	CCV Result	CCV %Rec	Limits	Units	Flag
1,4-Dioxane (P-Dioxane)	30.00	29.03	97	80-120	ug/L	

Surrogate	CCV Result	Limits	Units	Flag
Toluene-D8	104	80-120	%	

Analytical Method: SW-846 8260 B-Modified
Seq Number: 175110 Matrix: Water
Parent Sample Id: ICV-01 ICV Sample Id: ICV-01 Analyzed Date: 06/11/20 11:14

Parameter	Spike Amount	ICV Result	ICV %Rec	Limits	Units	Flag
1,4-Dioxane (P-Dioxane)	30.00	31.22	104	70-130	ug/L	

Surrogate	ICV Result	Limits	Units	Flag
Toluene-D8	99	80-120	%	

X = Recovery outside of QC Criteria

PHASE SEPARATION SCIENCE

CHAIN OF CUSTODY FORM

All fields must be completed accurately. Shaded sections for lab use only.

www.phaseonline.com ~ info@phaseonline.com

6630 Baltimore National Pike • Suite 103-A • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047

① PSS CLIENT: WSP USA | OFFICE LOCATION: Herndon, VA | PSS Work Order #: 20121516 | PAGE 1 OF 1

BILL TO (if different): | PHONE #: 703-709-6500

CONTACT: Eric Johnson | EMAIL: eric.johnson@wspcom

PROJECT NAME: Kop-Flex | PROJECT #: 31405450.010/04

SITE LOCATION: Hanover, MD | P.O. #:

SAMPLER(S): Shannon Burke | DW CERT #:

Matrix Codes: SW=Surface Water, DW=Drinking Water, GW=Ground Water, WW=Waste Water, O=Oil, S=Soil, SOL=Solid, A=Air, WI=Wipe

② ③

PSS ID	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX Use Codes	# OF CONTAINERS	SAMPLE TYPE: C=COMPOSITE G=GRAB	Preservatives Use Codes	3	3	1								Preservative Codes
							Analysis/ Method Required ③	Total metals + hardness (200.8)	Dissolved metals (200.8)	1,4-dioxane (8260B SIM)								
1	VSP-2	12/15/20	~~2~~ 1140	WW	2	G		X	X								Time 1140	1 - HCL
2	VSP-3	12/15/20	~~2~~ 1150	WW	2	G		X	X								Time 1150	2 - H_2SO_4
3	T-1200 Lead EF	12/15/20	~~2~~ 1155	WW	2	G		X	X								Time 1155	3 - HNO_3
4	Effluent VSP-4	12/15/20	~~5~~ 1130	WW	5	G		X	X	X							Time 1130	4 - NaOH
5	TB-121520	—		W	2	—				X								5 - E624KIT
																		6 - ICE
																		7 - Sodium Thiosulfate
																		8 - Ascorbic Acid
																		9 - TerraCore Kit

⑤

Relinquished By: (1)	Date	Time	Received By:
Shannon Burke	12/15/20	1422	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

④

Requested TAT (One TAT per COC)
☒ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

STATE RESULTS REPORTED TO:
☐ MD ☐ DE ☐ PA ☐ VA ☐ WV ☐ OTHER

COMPLIANCE?
☐ DW ☐ WW

EDD FORMAT TYPE

Ice Present: PLES TB: 3.1°C

Custody Seal: Cooler-Intact

Coolers: PLES Temp: 1.2-1.9°C

Shipping Carrier: FedEx

Special Instructions:
Metals = Al, Cu, Fe, Pb, Ni, Zn
Dissolved metals samples field filtered at time of collection.

PHASE SEPARATION SCIENCE

6630 Baltimore National Pike
Baltimore, MD 21228
410-747-8770
800-932-9047
www.phaseonline.com

Sample Receipt Checklist

Project Name: Kop-Flex
PSS Project No.: 20121516

Client Name WSP USA - Herndon
Disposal Date 01/19/2021

Received By Thomas Wingate
Date Received 12/15/2020 02:22:00 PM
Delivered By Client
Tracking No Not Applicable
Logged In By Thomas Wingate

Shipping Container(s)
No. of Coolers 1

Custody Seal(s) Intact?	Yes	Ice	Present
Seal(s) Signed / Dated?	Yes	Temp (deg C)	1.9
		Temp Blank Present	Yes

Documentation

COC agrees with sample labels?	Yes	Sampler Name	Shannon Burke
Chain of Custody	Yes	MD DW Cert. No.	N/A

Sample Container

Appropriate for Specified Analysis?	Yes	Custody Seal(s) Intact?	Not Applicable
Intact?	Yes	Seal(s) Signed / Dated	Not Applicable
Labeled and Labels Legible?	Yes		

Holding Time

All Samples Received Within Holding Time(s)?	Yes	Total No. of Samples Received	5
		Total No. of Containers Received	13

Preservation

Total Metals	(pH<2)	Yes
Dissolved Metals, filtered within 15 minutes of collection	(pH<2)	Yes
Orthophosphorus, filtered within 15 minutes of collection		N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, DOC (field filtered), COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	Yes
Do VOA vials have zero headspace?		Yes
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A
524 VOC (Rcvd with trip blanks)	(pH<2)	N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By: Thomas Wingate — Date: 12/15/2020

PM Review and Approval: Amber Confer — Date: 12/15/2020

ENCLOSURE B – LABORATORY ANALYTICAL REPORTS, NOVEMBER 2020 SEMI-ANNUAL GROUNDWATER SAMPLING

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

December 04, 2020

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

RE: Project: Kop Flex
Pace Project No.: 92507937

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.: 92507937

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.: 92507937

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92507937001	**MW-43**	Water	11/22/20 11:10	11/24/20 11:00
92507937002	**MW-39**	Water	11/22/20 11:25	11/24/20 11:00
92507937003	**MW-18**	Water	11/22/20 11:40	11/24/20 11:00
92507937004	**MW-5R**	Water	11/22/20 12:50	11/24/20 11:00
92507937005	**MW-40D**	Water	11/22/20 13:05	11/24/20 11:00
92507937006	**MW-1D**	Water	11/22/20 15:05	11/24/20 11:00
92507937007	**MW-23D**	Water	11/22/20 16:55	11/24/20 11:00
92507937008	**Trip Blank**	Water	11/22/20 00:00	11/24/20 11:00
92507937009	**MW-38R**	Water	11/22/20 13:20	11/25/20 11:42
92507937010	**MW-21D**	Water	11/22/20 14:10	11/25/20 11:42
92507937011	**MW-22D**	Water	11/22/20 15:25	11/25/20 11:42
92507937012	**MW-20**	Water	11/22/20 15:35	11/25/20 11:42
92507937013	**MW-4**	Water	11/22/20 15:50	11/25/20 11:42
92507937014	**MW-9**	Water	11/22/20 16:05	11/25/20 11:42
92507937015	**MW-16**	Water	11/22/20 17:10	11/25/20 11:42

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Kop Flex
Pace Project No.: 92507937

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92507937001	**MW-43**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937002	**MW-39**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937003	**MW-18**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937004	**MW-5R**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937005	**MW-40D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937006	**MW-1D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937007	**MW-23D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937008	**Trip Blank**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937009	**MW-38R**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507937010	**MW-21D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507937011	**MW-22D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507937012	**MW-20**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507937013	**MW-4**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507937014	**MW-9**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507937015	**MW-16**	EPA 8260D	PM1	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.: 92507937

Sample: MW-43 **Lab ID: 92507937001** Collected: 11/22/20 11:10 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 18:58	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 18:58	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 18:58	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 18:58	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 18:58	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 18:58	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 18:58	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 18:58	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 18:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 18:58	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 18:58	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 18:58	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:58	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 18:58	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 18:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 18:58	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 18:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 18:58	75-71-8	
1,1-Dichloroethane	**2.9**	ug/L	1.0	1		11/25/20 18:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 18:58	107-06-2	
1,1-Dichloroethene	**31.8**	ug/L	1.0	1		11/25/20 18:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:58	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 18:58	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 18:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 18:58	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 18:58	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 18:58	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 18:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 18:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 18:58	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 18:58	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 18:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:58	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
Pace Project No.: 92507937

Sample: MW-43 **Lab ID: 92507937001** Collected: 11/22/20 11:10 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 18:58	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 18:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 18:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 18:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 18:58	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 18:58	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 18:58	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 18:58	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 18:58	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 18:58	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/25/20 18:58	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 18:58	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/25/20 18:58	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**42.7**	ug/L	2.0	1		11/25/20 00:43	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		11/25/20 00:43	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/25/20 00:43	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.: 92507937

Sample: MW-39 **Lab ID: 92507937002** Collected: 11/22/20 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 16:36	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 16:36	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 16:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 16:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 16:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 16:36	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 16:36	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 16:36	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 16:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 16:36	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 16:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 16:36	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:36	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 16:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 16:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 16:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 16:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 16:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 16:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 16:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 16:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 16:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 16:36	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 16:36	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 16:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 16:36	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 16:36	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 16:36	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 16:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 16:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 16:36	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 16:36	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 16:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 16:36	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.: 92507937

Sample: MW-39 **Lab ID: 92507937002** Collected: 11/22/20 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 16:36	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 16:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 16:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 16:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 16:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 16:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 16:36	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 16:36	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 16:36	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 16:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 16:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 16:36	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 16:36	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		11/25/20 16:36	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/25/20 16:36	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		11/24/20 19:35	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		11/24/20 19:35	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/24/20 19:35	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.: 92507937

Sample: MW-18 **Lab ID: 92507937003** Collected: 11/22/20 11:40 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 15:25	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 15:25	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 15:25	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 15:25	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 15:25	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 15:25	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 15:25	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 15:25	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 15:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 15:25	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 15:25	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 15:25	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 15:25	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 15:25	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 15:25	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 15:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 15:25	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 15:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 15:25	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 15:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 15:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 15:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:25	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:25	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 15:25	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 15:25	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 15:25	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 15:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 15:25	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 15:25	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 15:25	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 15:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 15:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 15:25	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 15:25	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 15:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 15:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 15:25	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.: 92507937

Sample: MW-18 **Lab ID: 92507937003** Collected: 11/22/20 11:40 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 15:25	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 15:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 15:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 15:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 15:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 15:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 15:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 15:25	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 15:25	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 15:25	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 15:25	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 15:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 15:25	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 15:25	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/25/20 15:25	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/25/20 15:25	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 19:54	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/24/20 19:54	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 19:54	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.: 92507937

Sample: MW-5R **Lab ID: 92507937004** Collected: 11/22/20 12:50 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 17:30	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 17:30	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 17:30	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 17:30	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 17:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 17:30	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 17:30	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 17:30	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 17:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 17:30	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 17:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 17:30	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:30	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 17:30	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 17:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 17:30	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 17:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 17:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 17:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 17:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:30	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:30	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:30	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:30	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 17:30	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 17:30	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 17:30	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 17:30	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 17:30	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 17:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 17:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 17:30	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 17:30	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 17:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:30	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.: 92507937

Sample: MW-5R **Lab ID: 92507937004** Collected: 11/22/20 12:50 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 17:30	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 17:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 17:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 17:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 17:30	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 17:30	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 17:30	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 17:30	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 17:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 17:30	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		11/25/20 17:30	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 17:30	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/25/20 17:30	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**2.2**	ug/L	2.0	1		11/24/20 20:14	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		11/24/20 20:14	17060-07-0	
Toluene-d8 (S)	93	%	66-133	1		11/24/20 20:14	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.: 92507937

Sample: MW-40D **Lab ID: 92507937005** Collected: 11/22/20 13:05 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 17:47	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 17:47	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 17:47	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 17:47	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 17:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 17:47	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 17:47	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 17:47	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 17:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 17:47	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 17:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 17:47	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:47	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 17:47	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 17:47	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 17:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 17:47	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 17:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 17:47	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 17:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 17:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 17:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 17:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 17:47	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 17:47	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 17:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 17:47	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 17:47	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 17:47	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 17:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 17:47	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 17:47	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 17:47	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 17:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 17:47	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.: 92507937

Sample: MW-40D **Lab ID: 92507937005** Collected: 11/22/20 13:05 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 17:47	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 17:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 17:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 17:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 17:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 17:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 17:47	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 17:47	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 17:47	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 17:47	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 17:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 17:47	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/25/20 17:47	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 17:47	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/25/20 17:47	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 20:33	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/24/20 20:33	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 20:33	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.: 92507937

Sample: MW-1D **Lab ID: 92507937006** Collected: 11/22/20 15:05 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 18:05	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 18:05	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 18:05	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 18:05	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 18:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 18:05	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 18:05	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 18:05	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 18:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 18:05	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 18:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 18:05	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:05	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:05	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 18:05	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 18:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 18:05	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 18:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 18:05	75-71-8	
1,1-Dichloroethane	**3.1**	ug/L	1.0	1		11/25/20 18:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 18:05	107-06-2	
1,1-Dichloroethene	**17.6**	ug/L	1.0	1		11/25/20 18:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:05	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:05	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:05	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:05	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 18:05	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 18:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 18:05	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 18:05	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 18:05	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 18:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 18:05	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 18:05	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 18:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:05	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.: 92507937

Sample: MW-1D **Lab ID: 92507937006** Collected: 11/22/20 15:05 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 18:05	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 18:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 18:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 18:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 18:05	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 18:05	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 18:05	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 18:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 18:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 18:05	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/25/20 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/25/20 18:05	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/25/20 18:05	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**16.9**	ug/L	2.0	1		11/24/20 20:52	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		11/24/20 20:52	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 20:52	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
Pace Project No.: 92507937

Sample: MW-23D **Lab ID: 92507937007** Collected: 11/22/20 16:55 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 19:34	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 19:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 19:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 19:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 19:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 19:34	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 19:34	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 19:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 19:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 19:34	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 19:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 19:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 19:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 19:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 19:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 19:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 19:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 19:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 19:34	75-71-8	
1,1-Dichloroethane	**26.3**	ug/L	1.0	1		11/25/20 19:34	75-34-3	
1,2-Dichloroethane	**1.2**	ug/L	1.0	1		11/25/20 19:34	107-06-2	
1,1-Dichloroethene	**106**	ug/L	1.0	1		11/25/20 19:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 19:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 19:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 19:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 19:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 19:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 19:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 19:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 19:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 19:34	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 19:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 19:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 19:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 19:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 19:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 19:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 19:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 19:34	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 19:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 19:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 19:34	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
Pace Project No.: 92507937

Sample: MW-23D **Lab ID: 92507937007** Collected: 11/22/20 16:55 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 19:34	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 19:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 19:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 19:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 19:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 19:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 19:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 19:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 19:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 19:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 19:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 19:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 19:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		11/25/20 19:34	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/25/20 19:34	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/25/20 19:34	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**96.7**	ug/L	4.0	2		11/25/20 07:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	70-130	2		11/25/20 07:30	17060-07-0	
Toluene-d8 (S)	91	%	66-133	2		11/25/20 07:30	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.: 92507937

Sample: Trip Blank **Lab ID: 92507937008** Collected: 11/22/20 00:00 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 13:03	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 13:03	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 13:03	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 13:03	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 13:03	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 13:03	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 13:03	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 13:03	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 13:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 13:03	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 13:03	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 13:03	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 13:03	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 13:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 13:03	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 13:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 13:03	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 13:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 13:03	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 13:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 13:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 13:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 13:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 13:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 13:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 13:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 13:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 13:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 13:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 13:03	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 13:03	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 13:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 13:03	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 13:03	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 13:03	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 13:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 13:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 13:03	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 13:03	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 13:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 13:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 13:03	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.: 92507937

Sample: Trip Blank **Lab ID: 92507937008** Collected: 11/22/20 00:00 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 13:03	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 13:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 13:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 13:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 13:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 13:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 13:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 13:03	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 13:03	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 13:03	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 13:03	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 13:03	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 13:03	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/25/20 13:03	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		11/25/20 13:03	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/25/20 13:03	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 16:58	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/24/20 16:58	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 16:58	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.: 92507937

Sample: MW-38R **Lab ID: 92507937009** Collected: 11/22/20 13:20 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 04:02	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 04:02	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 04:02	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 04:02	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 04:02	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 04:02	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 04:02	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 04:02	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 04:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 04:02	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 04:02	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 04:02	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:02	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 04:02	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 04:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 04:02	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 04:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 04:02	75-71-8	
1,1-Dichloroethane	**6.5**	ug/L	1.0	1		11/26/20 04:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 04:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:02	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 04:02	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 04:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 04:02	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 04:02	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 04:02	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 04:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 04:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 04:02	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 04:02	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 04:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:02	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.: 92507937

Sample: MW-38R **Lab ID: 92507937009** Collected: 11/22/20 13:20 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 04:02	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 04:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 04:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 04:02	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 04:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 04:02	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 04:02	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 04:02	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 04:02	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 04:02	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 04:02	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 04:02	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	105	%	70-130	1		11/26/20 04:02	460-00-4	
1,2-Dichloroethane-d4 (S)	124	%	70-130	1		11/26/20 04:02	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 04:02	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**40.9**	ug/L	2.0	1		11/25/20 21:50	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		11/25/20 21:50	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/25/20 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.: 92507937

Sample: MW-21D **Lab ID: 92507937010** Collected: 11/22/20 14:10 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 02:49	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 02:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 02:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 02:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 02:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 02:49	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 02:49	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 02:49	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 02:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 02:49	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 02:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 02:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 02:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 02:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 02:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 02:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 02:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 02:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 02:49	107-06-2	
1,1-Dichloroethene	**7.8**	ug/L	1.0	1		11/26/20 02:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 02:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 02:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 02:49	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 02:49	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 02:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 02:49	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 02:49	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 02:49	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 02:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 02:49	108-10-1	
Methyl-tert-butyl ether	**3.0**	ug/L	1.0	1		11/26/20 02:49	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 02:49	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 02:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 02:49	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.: 92507937

Sample: MW-21D **Lab ID: 92507937010** Collected: 11/22/20 14:10 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 02:49	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 02:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 02:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 02:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 02:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 02:49	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 02:49	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 02:49	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 02:49	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 02:49	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 02:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 02:49	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/26/20 02:49	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	70-130	1		11/26/20 02:49	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 02:49	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**5.1**	ug/L	2.0	1		11/25/20 19:53	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		11/25/20 19:53	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/25/20 19:53	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.: 92507937

Sample: MW-22D **Lab ID: 92507937011** Collected: 11/22/20 15:25 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 03:26	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 03:26	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 03:26	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 03:26	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 03:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 03:26	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 03:26	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 03:26	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 03:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 03:26	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 03:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 03:26	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:26	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 03:26	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 03:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 03:26	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 03:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 03:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/26/20 03:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 03:26	107-06-2	
1,1-Dichloroethene	**7.1**	ug/L	1.0	1		11/26/20 03:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:26	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 03:26	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 03:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 03:26	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 03:26	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 03:26	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 03:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 03:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 03:26	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 03:26	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 03:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:26	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.: 92507937

Sample: MW-22D **Lab ID: 92507937011** Collected: 11/22/20 15:25 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 03:26	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 03:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 03:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 03:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 03:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 03:26	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 03:26	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 03:26	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 03:26	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 03:26	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 03:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 03:26	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		11/26/20 03:26	460-00-4	
1,2-Dichloroethane-d4 (S)	121	%	70-130	1		11/26/20 03:26	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		11/26/20 03:26	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**4.9**	ug/L	2.0	1		11/25/20 19:34	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		11/25/20 19:34	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/25/20 19:34	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.: 92507937

Sample: MW-20 **Lab ID: 92507937012** Collected: 11/22/20 15:35 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	50.0	2		12/03/20 01:47	67-64-1	
Benzene	ND	ug/L	2.0	2		12/03/20 01:47	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/03/20 01:47	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/03/20 01:47	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/03/20 01:47	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/03/20 01:47	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/03/20 01:47	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	10.0	2		12/03/20 01:47	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/03/20 01:47	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/03/20 01:47	75-00-3	v2
Chloroform	ND	ug/L	10.0	2		12/03/20 01:47	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/03/20 01:47	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/03/20 01:47	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/03/20 01:47	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	2		12/03/20 01:47	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/03/20 01:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/03/20 01:47	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/03/20 01:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/03/20 01:47	75-71-8	
1,1-Dichloroethane	**205**	ug/L	2.0	2		12/03/20 01:47	75-34-3	
1,2-Dichloroethane	**7.5**	ug/L	2.0	2		12/03/20 01:47	107-06-2	
1,1-Dichloroethene	**272**	ug/L	2.0	2		12/03/20 01:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/03/20 01:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/03/20 01:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/03/20 01:47	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/03/20 01:47	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/03/20 01:47	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/03/20 01:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/03/20 01:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/03/20 01:47	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/03/20 01:47	108-20-3	
Ethylbenzene	ND	ug/L	2.0	2		12/03/20 01:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/03/20 01:47	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/03/20 01:47	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/03/20 01:47	99-87-6	
Methylene Chloride	ND	ug/L	10.0	2		12/03/20 01:47	75-09-2	v2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/03/20 01:47	108-10-1	v2
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/03/20 01:47	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/03/20 01:47	91-20-3	
Styrene	ND	ug/L	2.0	2		12/03/20 01:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/03/20 01:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/03/20 01:47	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.: 92507937

Sample: MW-20 **Lab ID: 92507937012** Collected: 11/22/20 15:35 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	2.0	2		12/03/20 01:47	127-18-4	
Toluene	ND	ug/L	2.0	2		12/03/20 01:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/03/20 01:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	2.0	2		12/03/20 01:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/03/20 01:47	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/03/20 01:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/03/20 01:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/03/20 01:47	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/03/20 01:47	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/03/20 01:47	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/03/20 01:47	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/03/20 01:47	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/03/20 01:47	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	2		12/03/20 01:47	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	2		12/03/20 01:47	17060-07-0	
Toluene-d8 (S)	104	%	70-130	2		12/03/20 01:47	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**1260**	ug/L	40.0	20		11/25/20 23:08	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	70-130	20		11/25/20 23:08	17060-07-0	
Toluene-d8 (S)	94	%	66-133	20		11/25/20 23:08	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.: 92507937

Sample: MW-4 **Lab ID: 92507937013** Collected: 11/22/20 15:50 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 05:15	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 05:15	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 05:15	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 05:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 05:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 05:15	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 05:15	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 05:15	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 05:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 05:15	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 05:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 05:15	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 05:15	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 05:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 05:15	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 05:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 05:15	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 05:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 05:15	75-71-8	
1,1-Dichloroethane	**62.0**	ug/L	1.0	1		11/26/20 05:15	75-34-3	
1,2-Dichloroethane	**1.6**	ug/L	1.0	1		11/26/20 05:15	107-06-2	
1,1-Dichloroethene	**141**	ug/L	1.0	1		11/26/20 05:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 05:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 05:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:15	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 05:15	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 05:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 05:15	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 05:15	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 05:15	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 05:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 05:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 05:15	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 05:15	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 05:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 05:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 05:15	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.: 92507937

Sample: MW-4 **Lab ID: 92507937013** Collected: 11/22/20 15:50 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 05:15	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 05:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 05:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 05:15	79-00-5	
Trichloroethene	**1.2**	ug/L	1.0	1		11/26/20 05:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 05:15	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 05:15	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 05:15	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 05:15	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 05:15	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 05:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 05:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		11/26/20 05:15	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	70-130	1		11/26/20 05:15	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		11/26/20 05:15	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**151**	ug/L	5.0	2.5		12/01/20 15:26	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	70-130	2.5		12/01/20 15:26	17060-07-0	
Toluene-d8 (S)	107	%	66-133	2.5		12/01/20 15:26	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.: 92507937

Sample: MW-9 **Lab ID: 92507937014** Collected: 11/22/20 16:05 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 03:07	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 03:07	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 03:07	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 03:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 03:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 03:07	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 03:07	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 03:07	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 03:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 03:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 03:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 03:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 03:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 03:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 03:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 03:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 03:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 03:07	75-71-8	
1,1-Dichloroethane	**2.5**	ug/L	1.0	1		11/26/20 03:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 03:07	107-06-2	
1,1-Dichloroethene	**56.4**	ug/L	1.0	1		11/26/20 03:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 03:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 03:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 03:07	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 03:07	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 03:07	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 03:07	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 03:07	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 03:07	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 03:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 03:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 03:07	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 03:07	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 03:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 03:07	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.: 92507937

Sample: MW-9 **Lab ID: 92507937014** Collected: 11/22/20 16:05 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 03:07	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 03:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 03:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/26/20 03:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 03:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 03:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 03:07	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 03:07	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 03:07	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 03:07	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 03:07	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 03:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 03:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		11/26/20 03:07	460-00-4	
1,2-Dichloroethane-d4 (S)	121	%	70-130	1		11/26/20 03:07	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/26/20 03:07	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**25.7**	ug/L	2.0	1		11/25/20 20:13	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		11/25/20 20:13	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/25/20 20:13	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.: 92507937

Sample: MW-16 **Lab ID: 92507937015** Collected: 11/22/20 17:10 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	500	20		12/04/20 13:43	67-64-1	
Benzene	ND	ug/L	20.0	20		12/04/20 13:43	71-43-2	
Bromobenzene	ND	ug/L	20.0	20		12/04/20 13:43	108-86-1	
Bromochloromethane	ND	ug/L	20.0	20		12/04/20 13:43	74-97-5	
Bromodichloromethane	ND	ug/L	20.0	20		12/04/20 13:43	75-27-4	
Bromoform	ND	ug/L	20.0	20		12/04/20 13:43	75-25-2	
Bromomethane	ND	ug/L	40.0	20		12/04/20 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	20		12/04/20 13:43	78-93-3	
Carbon tetrachloride	ND	ug/L	20.0	20		12/04/20 13:43	56-23-5	
Chlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	108-90-7	
Chloroethane	ND	ug/L	20.0	20		12/04/20 13:43	75-00-3	IK,v1
Chloroform	ND	ug/L	100	20		12/04/20 13:43	67-66-3	
Chloromethane	ND	ug/L	20.0	20		12/04/20 13:43	74-87-3	IK
2-Chlorotoluene	ND	ug/L	20.0	20		12/04/20 13:43	95-49-8	
4-Chlorotoluene	ND	ug/L	20.0	20		12/04/20 13:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	100	20		12/04/20 13:43	96-12-8	
Dibromochloromethane	ND	ug/L	20.0	20		12/04/20 13:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	20.0	20		12/04/20 13:43	106-93-4	
Dibromomethane	ND	ug/L	20.0	20		12/04/20 13:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	20.0	20		12/04/20 13:43	75-71-8	
1,1-Dichloroethane	**1560**	ug/L	20.0	20		12/04/20 13:43	75-34-3	M1
1,2-Dichloroethane	ND	ug/L	20.0	20		12/04/20 13:43	107-06-2	
1,1-Dichloroethene	**1130**	ug/L	20.0	20		12/04/20 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	20.0	20		12/04/20 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	20.0	20		12/04/20 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	20.0	20		12/04/20 13:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	20.0	20		12/04/20 13:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	20.0	20		12/04/20 13:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	20.0	20		12/04/20 13:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	20.0	20		12/04/20 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	20.0	20		12/04/20 13:43	10061-02-6	
Diisopropyl ether	ND	ug/L	20.0	20		12/04/20 13:43	108-20-3	
Ethylbenzene	ND	ug/L	20.0	20		12/04/20 13:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	20.0	20		12/04/20 13:43	87-68-3	
2-Hexanone	ND	ug/L	100	20		12/04/20 13:43	591-78-6	
p-Isopropyltoluene	ND	ug/L	20.0	20		12/04/20 13:43	99-87-6	
Methylene Chloride	ND	ug/L	100	20		12/04/20 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	20		12/04/20 13:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	20.0	20		12/04/20 13:43	1634-04-4	
Naphthalene	ND	ug/L	20.0	20		12/04/20 13:43	91-20-3	
Styrene	ND	ug/L	20.0	20		12/04/20 13:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	20.0	20		12/04/20 13:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	20.0	20		12/04/20 13:43	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Kop Flex
Pace Project No.: 92507937

Sample: MW-16 **Lab ID: 92507937015** Collected: 11/22/20 17:10 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	20.0	20		12/04/20 13:43	127-18-4	
Toluene	ND	ug/L	20.0	20		12/04/20 13:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	20.0	20		12/04/20 13:43	120-82-1	
1,1,1-Trichloroethane	**2060**	ug/L	20.0	20		12/04/20 13:43	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/L	20.0	20		12/04/20 13:43	79-00-5	
Trichloroethene	ND	ug/L	20.0	20		12/04/20 13:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	20.0	20		12/04/20 13:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	20.0	20		12/04/20 13:43	96-18-4	
Vinyl acetate	ND	ug/L	40.0	20		12/04/20 13:43	108-05-4	
Vinyl chloride	ND	ug/L	20.0	20		12/04/20 13:43	75-01-4	
Xylene (Total)	ND	ug/L	20.0	20		12/04/20 13:43	1330-20-7	
m&p-Xylene	ND	ug/L	40.0	20		12/04/20 13:43	179601-23-1	
o-Xylene	ND	ug/L	20.0	20		12/04/20 13:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	20		12/04/20 13:43	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	70-130	20		12/04/20 13:43	17060-07-0	
Toluene-d8 (S)	104	%	70-130	20		12/04/20 13:43	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**84.2**	ug/L	2.0	1		11/25/20 20:32	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/25/20 20:32	17060-07-0	
Toluene-d8 (S)	91	%	66-133	1		11/25/20 20:32	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.: 92507937

QC Batch: 582948
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507937001, 92507937002, 92507937003, 92507937004, 92507937005, 92507937006, 92507937007, 92507937008

METHOD BLANK: 3082529
Matrix: Water
Associated Lab Samples: 92507937001, 92507937002, 92507937003, 92507937004, 92507937005, 92507937006, 92507937007, 92507937008

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	

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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.: 92507937

METHOD BLANK: 3082529 Matrix: Water

Associated Lab Samples: 92507937001, 92507937002, 92507937003, 92507937004, 92507937005, 92507937006, 92507937007, 92507937008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	11/25/20 12:10	
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	

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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.: 92507937

LABORATORY CONTROL SAMPLE: 3082530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	50	46.7	93	70-130	
1,3-Dichloropropane	ug/L	50	50.9	102	70-130	
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	

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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.: 92507937

LABORATORY CONTROL SAMPLE: 3082530

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

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	

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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.: 92507937

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
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	
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			

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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.: 92507937

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: 92507937009, 92507937010, 92507937011, 92507937013, 92507937014

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507937009, 92507937010, 92507937011, 92507937013, 92507937014

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	
Dibromomethane	ug/L	ND	1.0	11/26/20 00:23	

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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.: 92507937

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507937009, 92507937010, 92507937011, 92507937013, 92507937014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
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	
1,3-Dichlorobenzene	ug/L	50	50.5	101	70-130	
1,3-Dichloropropane	ug/L	50	51.7	103	70-130	

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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.: 92507937

LABORATORY CONTROL SAMPLE: 3083149

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

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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.: 92507937

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		20	20	19.7	20.9	98	105	70-135	6	30	
1,1,1-Trichloroethane	ug/L		20	20	22.5	22.6	113	113	70-148	0	30	
1,1,2,2-Tetrachloroethane	ug/L		20	20	15.7	27.0	78	135	70-131	53	30	M1,R1
1,1,2-Trichloroethane	ug/L		20	20	26.7	21.5	134	107	70-136	22	30	
1,1-Dichloroethane	ug/L		20	20	21.3	21.4	107	107	70-147	1	30	
1,1-Dichloroethene	ug/L		20	20	21.0	21.3	105	107	70-158	1	30	
1,1-Dichloropropene	ug/L		20	20	21.3	21.7	107	109	70-149	2	30	
1,2,3-Trichlorobenzene	ug/L		20	20	18.1	17.7	90	89	68-140	2	30	
1,2,3-Trichloropropane	ug/L		20	20	15.7	26.3	78	132	67-137	51	30	R1
1,2,4-Trichlorobenzene	ug/L		20	20	17.9	17.5	89	88	70-139	2	30	
1,2-Dibromo-3-chloropropane	ug/L		20	20	22.4	21.1	112	105	69-136	6	30	
1,2-Dibromoethane (EDB)	ug/L		20	20	21.1	21.8	106	109	70-137	3	30	
1,2-Dichlorobenzene	ug/L		20	20	20.0	19.2	100	96	70-133	4	30	
1,2-Dichloroethane	ug/L		20	20	20.3	21.2	102	106	67-138	4	30	
1,2-Dichloropropane	ug/L		20	20	26.4	20.9	132	105	70-138	23	30	
1,3-Dichlorobenzene	ug/L		20	20	19.5	21.4	97	107	70-133	9	30	
1,3-Dichloropropane	ug/L		20	20	21.4	21.7	107	109	70-136	1	30	
1,4-Dichlorobenzene	ug/L		20	20	19.8	21.2	99	106	70-133	7	30	
2,2-Dichloropropane	ug/L		20	20	14.6	15.1	73	75	52-155	3	30	
2-Butanone (MEK)	ug/L		40	40	44.6	44.3	111	111	61-147	1	30	
2-Chlorotoluene	ug/L		20	20	20.7	26.5	104	132	70-141	24	30	
2-Hexanone	ug/L		40	40	40.7	40.6	102	101	67-139	0	30	
4-Chlorotoluene	ug/L		20	20	19.6	23.8	98	119	70-135	19	30	
4-Methyl-2-pentanone (MIBK)	ug/L		40	40	51.2	41.4	128	103	67-136	21	30	
Acetone	ug/L		40	40	46.4	46.0	116	115	55-159	1	30	
Benzene	ug/L		20	20	20.9	22.4	105	112	67-150	7	30	
Bromobenzene	ug/L		20	20	21.8	25.6	109	128	70-134	16	30	
Bromochloromethane	ug/L		20	20	22.4	22.4	112	112	70-146	0	30	
Bromodichloromethane	ug/L		20	20	23.7	20.3	118	102	70-138	15	30	
Bromoform	ug/L		20	20	18.5	19.6	92	98	57-138	6	30	
Bromomethane	ug/L		20	20	23.7	23.8	119	119	10-200	0	30	
Carbon tetrachloride	ug/L		20	20	21.8	24.2	109	121	70-147	11	30	
Chlorobenzene	ug/L		20	20	21.1	21.3	106	107	70-137	1	30	
Chloroethane	ug/L		20	20	20.0	21.0	100	105	51-166	5	30	IK,v3
Chloroform	ug/L		20	20	22.4	23.2	112	116	70-144	3	30	
Chloromethane	ug/L		20	20	19.4	19.8	97	99	24-161	2	30	
cis-1,2-Dichloroethene	ug/L		20	20	21.2	22.2	106	111	67-148	5	30	
cis-1,3-Dichloropropene	ug/L		20	20	23.7	20.1	119	100	70-142	17	30	
Dibromochloromethane	ug/L		20	20	21.5	22.8	107	114	68-138	6	30	
Dibromomethane	ug/L		20	20	23.7	20.0	118	100	70-134	17	30	
Dichlorodifluoromethane	ug/L		20	20	14.7	15.2	74	76	43-155	3	30	
Diisopropyl ether	ug/L		20	20	19.8	19.9	99	100	65-146	1	30	
Ethylbenzene	ug/L		20	20	20.0	20.7	100	103	68-143	3	30	
Hexachloro-1,3-butadiene	ug/L		20	20	17.2	16.3	86	81	62-151	6	30	

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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.: 92507937

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
m&p-Xylene	ug/L		40	40	40.4	42.0	101	105	53-157	4	30	
Methyl-tert-butyl ether	ug/L		20	20	19.6	19.8	98	99	59-156	1	30	
Methylene Chloride	ug/L		20	20	20.6	20.3	103	102	64-148	1	30	
Naphthalene	ug/L		20	20	20.2	19.7	101	98	57-150	2	30	
o-Xylene	ug/L		20	20	21.5	22.0	107	110	68-143	2	30	
p-Isopropyltoluene	ug/L		20	20	19.2	21.5	96	107	70-141	11	30	
Styrene	ug/L		20	20	20.8	21.4	104	107	70-136	3	30	
Tetrachloroethene	ug/L		20	20	19.0	19.7	95	98	70-139	4	30	
Toluene	ug/L		20	20	26.5	21.8	132	109	47-157	19	30	
trans-1,2-Dichloroethene	ug/L		20	20	19.8	20.5	99	102	70-149	3	30	
trans-1,3-Dichloropropene	ug/L		20	20	24.5	21.0	123	105	70-138	15	30	
Trichloroethene	ug/L		20	20	20.8	22.2	104	111	70-149	7	30	
Trichlorofluoromethane	ug/L		20	20	20.3	20.3	101	102	61-154	0	30	
Vinyl acetate	ug/L		40	40	28.1	27.6	70	69	48-156	2	30	
Vinyl chloride	ug/L		20	20	19.4	19.4	97	97	55-172	0	30	
Xylene (Total)	ug/L		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			

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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.: 92507937

QC Batch: 583926
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92507937012

METHOD BLANK: 3086935 Matrix: Water
Associated Lab Samples: 92507937012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/02/20 21:57	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,3-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
2,2-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
2-Butanone (MEK)	ug/L	ND	5.0	12/02/20 21:57	
2-Chlorotoluene	ug/L	ND	1.0	12/02/20 21:57	
2-Hexanone	ug/L	ND	5.0	12/02/20 21:57	
4-Chlorotoluene	ug/L	ND	1.0	12/02/20 21:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/02/20 21:57	v2
Acetone	ug/L	ND	25.0	12/02/20 21:57	
Benzene	ug/L	ND	1.0	12/02/20 21:57	
Bromobenzene	ug/L	ND	1.0	12/02/20 21:57	
Bromochloromethane	ug/L	ND	1.0	12/02/20 21:57	
Bromodichloromethane	ug/L	ND	1.0	12/02/20 21:57	
Bromoform	ug/L	ND	1.0	12/02/20 21:57	
Bromomethane	ug/L	ND	2.0	12/02/20 21:57	v2
Carbon tetrachloride	ug/L	ND	1.0	12/02/20 21:57	
Chlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
Chloroethane	ug/L	ND	1.0	12/02/20 21:57	v2
Chloroform	ug/L	ND	5.0	12/02/20 21:57	
Chloromethane	ug/L	ND	1.0	12/02/20 21:57	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
Dibromochloromethane	ug/L	ND	1.0	12/02/20 21:57	
Dibromomethane	ug/L	ND	1.0	12/02/20 21:57	

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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.: 92507937

METHOD BLANK: 3086935 Matrix: Water
Associated Lab Samples: 92507937012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/02/20 21:57	
Diisopropyl ether	ug/L	ND	1.0	12/02/20 21:57	
Ethylbenzene	ug/L	ND	1.0	12/02/20 21:57	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/02/20 21:57	
m&p-Xylene	ug/L	ND	2.0	12/02/20 21:57	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/02/20 21:57	
Methylene Chloride	ug/L	ND	5.0	12/02/20 21:57	v2
Naphthalene	ug/L	ND	1.0	12/02/20 21:57	
o-Xylene	ug/L	ND	1.0	12/02/20 21:57	
p-Isopropyltoluene	ug/L	ND	1.0	12/02/20 21:57	
Styrene	ug/L	ND	1.0	12/02/20 21:57	
Tetrachloroethene	ug/L	ND	1.0	12/02/20 21:57	
Toluene	ug/L	ND	1.0	12/02/20 21:57	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
Trichloroethene	ug/L	ND	1.0	12/02/20 21:57	
Trichlorofluoromethane	ug/L	ND	1.0	12/02/20 21:57	
Vinyl acetate	ug/L	ND	2.0	12/02/20 21:57	
Vinyl chloride	ug/L	ND	1.0	12/02/20 21:57	
Xylene (Total)	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloroethane-d4 (S)	%	93	70-130	12/02/20 21:57	
4-Bromofluorobenzene (S)	%	100	70-130	12/02/20 21:57	
Toluene-d8 (S)	%	104	70-130	12/02/20 21:57	

LABORATORY CONTROL SAMPLE: 3086936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.8	108	70-130	
1,1,1-Trichloroethane	ug/L	50	43.1	86	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.9	102	70-130	
1,1,2-Trichloroethane	ug/L	50	45.3	91	70-130	
1,1-Dichloroethane	ug/L	50	42.5	85	70-130	
1,1-Dichloroethene	ug/L	50	44.0	88	70-132	
1,1-Dichloropropene	ug/L	50	45.7	91	70-131	
1,2,3-Trichlorobenzene	ug/L	50	52.1	104	70-134	
1,2,3-Trichloropropane	ug/L	50	53.1	106	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.0	106	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.6	103	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	55.6	111	70-130	
1,2-Dichlorobenzene	ug/L	50	53.0	106	70-130	
1,2-Dichloroethane	ug/L	50	40.6	81	70-130	
1,2-Dichloropropane	ug/L	50	46.2	92	70-130	
1,3-Dichlorobenzene	ug/L	50	54.2	108	70-130	
1,3-Dichloropropane	ug/L	50	55.7	111	70-130	

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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.: 92507937

LABORATORY CONTROL SAMPLE: 3086936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	53.4	107	70-130	
2,2-Dichloropropane	ug/L	50	42.9	86	70-130	
2-Butanone (MEK)	ug/L	100	83.8	84	70-133	
2-Chlorotoluene	ug/L	50	53.0	106	70-130	
2-Hexanone	ug/L	100	92.3	92	70-130	
4-Chlorotoluene	ug/L	50	52.1	104	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	78.0	78	70-130	v3
Acetone	ug/L	100	86.7	87	70-144	
Benzene	ug/L	50	45.5	91	70-130	
Bromobenzene	ug/L	50	52.9	106	70-130	
Bromochloromethane	ug/L	50	44.6	89	70-130	
Bromodichloromethane	ug/L	50	43.0	86	70-130	
Bromoform	ug/L	50	50.5	101	70-131	
Bromomethane	ug/L	50	37.0	74	30-177	v3
Carbon tetrachloride	ug/L	50	44.5	89	70-130	
Chlorobenzene	ug/L	50	51.6	103	70-130	
Chloroethane	ug/L	50	39.4	79	46-131	v3
Chloroform	ug/L	50	43.2	86	70-130	
Chloromethane	ug/L	50	40.2	80	49-130	
cis-1,2-Dichloroethene	ug/L	50	40.8	82	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.6	97	70-130	
Dibromochloromethane	ug/L	50	56.9	114	70-130	
Dibromomethane	ug/L	50	45.3	91	70-130	
Dichlorodifluoromethane	ug/L	50	43.1	86	52-134	
Diisopropyl ether	ug/L	50	42.1	84	70-131	
Ethylbenzene	ug/L	50	50.4	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.6	103	70-131	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	44.6	89	70-130	
Methylene Chloride	ug/L	50	39.5	79	68-130	v3
Naphthalene	ug/L	50	52.5	105	70-133	
o-Xylene	ug/L	50	53.7	107	70-130	
p-Isopropyltoluene	ug/L	50	53.5	107	70-130	
Styrene	ug/L	50	52.9	106	70-130	
Tetrachloroethene	ug/L	50	51.5	103	70-130	
Toluene	ug/L	50	42.3	85	70-130	
trans-1,2-Dichloroethene	ug/L	50	42.1	84	70-130	
trans-1,3-Dichloropropene	ug/L	50	46.2	92	70-130	
Trichloroethene	ug/L	50	47.4	95	70-130	
Trichlorofluoromethane	ug/L	50	41.6	83	61-130	
Vinyl acetate	ug/L	100	106	106	70-140	
Vinyl chloride	ug/L	50	40.0	80	59-142	
Xylene (Total)	ug/L	150	158	105	70-130	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			93	70-130	

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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.: 92507937

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3086937 3086938

Parameter	Units	92508563001 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	4000	4000	4170	4230	104	106	70-135	1	30	
1,1,1-Trichloroethane	ug/L	ND	4000	4000	3930	3980	98	100	70-148	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	4000	4000	4060	4090	102	102	70-131	1	30	
1,1,2-Trichloroethane	ug/L	ND	4000	4000	3640	3690	91	92	70-136	2	30	
1,1-Dichloroethane	ug/L	ND	4000	4000	3880	3880	97	97	70-147	0	30	
1,1-Dichloroethene	ug/L	ND	4000	4000	4130	4040	103	101	70-158	2	30	
1,1-Dichloropropene	ug/L	ND	4000	4000	4040	4160	101	104	70-149	3	30	
1,2,3-Trichlorobenzene	ug/L	ND	4000	4000	4140	4500	103	112	68-140	8	30	
1,2,3-Trichloropropane	ug/L	ND	4000	4000	3800	3790	95	95	67-137	0	30	
1,2,4-Trichlorobenzene	ug/L	ND	4000	4000	4200	4530	105	113	70-139	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	4000	4000	4160	4260	104	107	69-136	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	4000	4000	4300	4400	107	110	70-137	2	30	
1,2-Dichlorobenzene	ug/L	ND	4000	4000	4450	4650	111	116	70-133	5	30	
1,2-Dichloroethane	ug/L	ND	4000	4000	3560	3610	89	90	67-138	1	30	
1,2-Dichloropropane	ug/L	ND	4000	4000	4060	4120	102	103	70-138	1	30	
1,3-Dichlorobenzene	ug/L	ND	4000	4000	4540	4630	113	116	70-133	2	30	
1,3-Dichloropropane	ug/L	ND	4000	4000	4480	4460	112	111	70-136	0	30	
1,4-Dichlorobenzene	ug/L	ND	4000	4000	4470	4570	112	114	70-133	2	30	
2,2-Dichloropropane	ug/L	ND	4000	4000	3260	3260	82	81	52-155	0	30	
2-Butanone (MEK)	ug/L	ND	8000	8000	7080	6810	89	85	61-147	4	30	
2-Chlorotoluene	ug/L	ND	4000	4000	4480	4560	112	114	70-141	2	30	
2-Hexanone	ug/L	ND	8000	8000	7690	7680	96	96	67-139	0	30	
4-Chlorotoluene	ug/L	ND	4000	4000	4460	4600	112	115	70-135	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	8000	8000	6280	6420	79	80	67-136	2	30	v3
Acetone	ug/L	ND	8000	8000	7840	7690	98	96	55-159	2	30	
Benzene	ug/L	ND	4000	4000	4070	4050	102	101	67-150	0	30	
Bromobenzene	ug/L	ND	4000	4000	4400	4600	110	115	70-134	4	30	
Bromochloromethane	ug/L	ND	4000	4000	4020	4160	100	104	70-146	4	30	
Bromodichloromethane	ug/L	ND	4000	4000	3750	3820	94	95	70-138	2	30	
Bromoform	ug/L	ND	4000	4000	3710	3760	93	94	57-138	1	30	
Bromomethane	ug/L	ND	4000	4000	3050	3540	76	88	10-200	15	30	v3
Carbon tetrachloride	ug/L	ND	4000	4000	4090	4160	102	104	70-147	2	30	
Chlorobenzene	ug/L	ND	4000	4000	4460	4490	111	112	70-137	1	30	
Chloroethane	ug/L	ND	4000	4000	4090	3950	102	99	51-166	3	30	v3
Chloroform	ug/L	ND	4000	4000	3500	3690	87	92	70-144	5	30	
Chloromethane	ug/L	ND	4000	4000	3730	3800	93	95	24-161	2	30	
cis-1,2-Dichloroethene	ug/L	3240	4000	4000	6690	6720	86	87	67-148	1	30	
cis-1,3-Dichloropropene	ug/L	ND	4000	4000	3860	3960	96	99	70-142	3	30	
Dibromochloromethane	ug/L	ND	4000	4000	4400	4470	110	112	68-138	2	30	
Dibromomethane	ug/L	ND	4000	4000	4010	4090	100	102	70-134	2	30	
Dichlorodifluoromethane	ug/L	ND	4000	4000	3710	3710	93	93	43-155	0	30	
Diisopropyl ether	ug/L	ND	4000	4000	3370	3420	84	86	65-146	1	30	
Ethylbenzene	ug/L	ND	4000	4000	4440	4450	111	111	68-143	0	30	
Hexachloro-1,3-butadiene	ug/L	ND	4000	4000	4160	4250	104	106	62-151	2	30	

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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.: 92507937

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3086937 3086938

Parameter	Units	92508563001 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	8000	8000	9260	9220	116	115	53-157	0	30	
Methyl-tert-butyl ether	ug/L	ND	4000	4000	3680	3730	92	93	59-156	1	30	
Methylene Chloride	ug/L	ND	4000	4000	3700	3780	92	94	64-148	2	30	v3
Naphthalene	ug/L	ND	4000	4000	4200	4540	105	114	57-150	8	30	
o-Xylene	ug/L	ND	4000	4000	4660	4600	116	115	68-143	1	30	
p-Isopropyltoluene	ug/L	ND	4000	4000	4380	4620	109	116	70-141	5	30	
Styrene	ug/L	ND	4000	4000	4600	4620	115	116	70-136	0	30	
Tetrachloroethene	ug/L	ND	4000	4000	4430	4380	111	109	70-139	1	30	
Toluene	ug/L	ND	4000	4000	3860	3930	94	96	47-157	2	30	
trans-1,2-Dichloroethene	ug/L	ND	4000	4000	3920	3990	98	100	70-149	2	30	
trans-1,3-Dichloropropene	ug/L	ND	4000	4000	3530	3590	88	90	70-138	2	30	
Trichloroethene	ug/L	19800	4000	4000	24700	24700	123	124	70-149	0	30	
Trichlorofluoromethane	ug/L	ND	4000	4000	4140	3860	104	97	61-154	7	30	
Vinyl acetate	ug/L	ND	8000	8000	8360	8520	105	106	48-156	2	30	
Vinyl chloride	ug/L	477	4000	4000	4140	4210	92	93	55-172	2	30	
Xylene (Total)	ug/L	ND	12000	12000	13900	13800	116	115	66-145	1	30	
1,2-Dichloroethane-d4 (S)	%						96	101	70-130			
4-Bromofluorobenzene (S)	%						100	99	70-130			
Toluene-d8 (S)	%						95	95	70-130			

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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.: 92507937

QC Batch: 584621
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92507937015

METHOD BLANK: 3090277 Matrix: Water
Associated Lab Samples: 92507937015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,1-Dichloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,1-Dichloroethene	ug/L	ND	1.0	12/04/20 11:01	
1,1-Dichloropropene	ug/L	ND	1.0	12/04/20 11:01	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/04/20 11:01	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/04/20 11:01	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/04/20 11:01	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
1,2-Dichloroethane	ug/L	ND	1.0	12/04/20 11:01	
1,2-Dichloropropane	ug/L	ND	1.0	12/04/20 11:01	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
1,3-Dichloropropane	ug/L	ND	1.0	12/04/20 11:01	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
2,2-Dichloropropane	ug/L	ND	1.0	12/04/20 11:01	
2-Butanone (MEK)	ug/L	ND	5.0	12/04/20 11:01	
2-Chlorotoluene	ug/L	ND	1.0	12/04/20 11:01	
2-Hexanone	ug/L	ND	5.0	12/04/20 11:01	
4-Chlorotoluene	ug/L	ND	1.0	12/04/20 11:01	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/04/20 11:01	
Acetone	ug/L	ND	25.0	12/04/20 11:01	
Benzene	ug/L	ND	1.0	12/04/20 11:01	
Bromobenzene	ug/L	ND	1.0	12/04/20 11:01	
Bromochloromethane	ug/L	ND	1.0	12/04/20 11:01	
Bromodichloromethane	ug/L	ND	1.0	12/04/20 11:01	
Bromoform	ug/L	ND	1.0	12/04/20 11:01	
Bromomethane	ug/L	ND	2.0	12/04/20 11:01	
Carbon tetrachloride	ug/L	ND	1.0	12/04/20 11:01	
Chlorobenzene	ug/L	ND	1.0	12/04/20 11:01	
Chloroethane	ug/L	ND	1.0	12/04/20 11:01	IK,v1
Chloroform	ug/L	ND	5.0	12/04/20 11:01	
Chloromethane	ug/L	ND	1.0	12/04/20 11:01	IK
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/04/20 11:01	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/04/20 11:01	
Dibromochloromethane	ug/L	ND	1.0	12/04/20 11:01	
Dibromomethane	ug/L	ND	1.0	12/04/20 11:01	

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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.: 92507937

METHOD BLANK: 3090277 Matrix: Water
Associated Lab Samples: 92507937015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/04/20 11:01	
Diisopropyl ether	ug/L	ND	1.0	12/04/20 11:01	
Ethylbenzene	ug/L	ND	1.0	12/04/20 11:01	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/04/20 11:01	
m&p-Xylene	ug/L	ND	2.0	12/04/20 11:01	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/04/20 11:01	
Methylene Chloride	ug/L	ND	5.0	12/04/20 11:01	
Naphthalene	ug/L	ND	1.0	12/04/20 11:01	
o-Xylene	ug/L	ND	1.0	12/04/20 11:01	
p-Isopropyltoluene	ug/L	ND	1.0	12/04/20 11:01	
Styrene	ug/L	ND	1.0	12/04/20 11:01	
Tetrachloroethene	ug/L	ND	1.0	12/04/20 11:01	
Toluene	ug/L	ND	1.0	12/04/20 11:01	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/04/20 11:01	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/04/20 11:01	
Trichloroethene	ug/L	ND	1.0	12/04/20 11:01	
Trichlorofluoromethane	ug/L	ND	1.0	12/04/20 11:01	
Vinyl acetate	ug/L	ND	2.0	12/04/20 11:01	
Vinyl chloride	ug/L	ND	1.0	12/04/20 11:01	
Xylene (Total)	ug/L	ND	1.0	12/04/20 11:01	
1,2-Dichloroethane-d4 (S)	%	115	70-130	12/04/20 11:01	
4-Bromofluorobenzene (S)	%	97	70-130	12/04/20 11:01	
Toluene-d8 (S)	%	104	70-130	12/04/20 11:01	

LABORATORY CONTROL SAMPLE: 3090278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.5	107	70-130	
1,1,1-Trichloroethane	ug/L	50	51.5	103	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.0	100	70-130	
1,1,2-Trichloroethane	ug/L	50	49.9	100	70-130	
1,1-Dichloroethane	ug/L	50	48.5	97	70-130	
1,1-Dichloroethene	ug/L	50	51.5	103	70-132	
1,1-Dichloropropene	ug/L	50	50.6	101	70-131	
1,2,3-Trichlorobenzene	ug/L	50	53.1	106	70-134	
1,2,3-Trichloropropane	ug/L	50	49.7	99	70-130	
1,2,4-Trichlorobenzene	ug/L	50	52.8	106	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	52.9	106	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	53.4	107	70-130	
1,2-Dichlorobenzene	ug/L	50	50.5	101	70-130	
1,2-Dichloroethane	ug/L	50	56.9	114	70-130	
1,2-Dichloropropane	ug/L	50	52.8	106	70-130	
1,3-Dichlorobenzene	ug/L	50	51.9	104	70-130	
1,3-Dichloropropane	ug/L	50	52.5	105	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop Flex
Pace Project No.: 92507937

LABORATORY CONTROL SAMPLE: 3090278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	51.6	103	70-130	
2,2-Dichloropropane	ug/L	50	50.7	101	70-130	
2-Butanone (MEK)	ug/L	100	97.6	98	70-133	
2-Chlorotoluene	ug/L	50	49.3	99	70-130	
2-Hexanone	ug/L	100	91.1	91	70-130	
4-Chlorotoluene	ug/L	50	48.6	97	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.1	95	70-130	
Acetone	ug/L	100	102	102	70-144	
Benzene	ug/L	50	51.4	103	70-130	
Bromobenzene	ug/L	50	50.9	102	70-130	
Bromochloromethane	ug/L	50	51.9	104	70-130	
Bromodichloromethane	ug/L	50	49.4	99	70-130	
Bromoform	ug/L	50	51.6	103	70-131	
Bromomethane	ug/L	50	54.7	109	30-177	
Carbon tetrachloride	ug/L	50	53.7	107	70-130	
Chlorobenzene	ug/L	50	52.0	104	70-130	
Chloroethane	ug/L	50	46.6	93	46-131	IK,v1
Chloroform	ug/L	50	53.8	108	70-130	
Chloromethane	ug/L	50	48.8	98	49-130	IK
cis-1,2-Dichloroethene	ug/L	50	47.8	96	70-130	
cis-1,3-Dichloropropene	ug/L	50	53.1	106	70-130	
Dibromochloromethane	ug/L	50	54.6	109	70-130	
Dibromomethane	ug/L	50	54.0	108	70-130	
Dichlorodifluoromethane	ug/L	50	47.4	95	52-134	
Diisopropyl ether	ug/L	50	45.7	91	70-131	
Ethylbenzene	ug/L	50	50.4	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	55.1	110	70-131	
m&p-Xylene	ug/L	100	100	100	70-130	
Methyl-tert-butyl ether	ug/L	50	47.4	95	70-130	
Methylene Chloride	ug/L	50	55.0	110	68-130	
Naphthalene	ug/L	50	49.1	98	70-133	
o-Xylene	ug/L	50	52.0	104	70-130	
p-Isopropyltoluene	ug/L	50	49.4	99	70-130	
Styrene	ug/L	50	50.5	101	70-130	
Tetrachloroethene	ug/L	50	54.8	110	70-130	
Toluene	ug/L	50	50.8	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	50.8	102	70-130	
trans-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Trichloroethene	ug/L	50	53.5	107	70-130	
Trichlorofluoromethane	ug/L	50	49.4	99	61-130	
Vinyl acetate	ug/L	100	103	103	70-140	
Vinyl chloride	ug/L	50	41.1	82	59-142	
Xylene (Total)	ug/L	150	152	101	70-130	
1,2-Dichloroethane-d4 (S)	%			89	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			99	70-130	

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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.: 92507937

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3090279 3090280

Parameter	Units	92507937015 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	400	400	427	445	107	111	70-135	4	30	
1,1,1-Trichloroethane	ug/L	2060	400	400	2330	2360	67	76	70-148	1	30	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	400	400	433	425	108	106	70-131	2	30	
1,1,2-Trichloroethane	ug/L	ND	400	400	397	401	99	100	70-136	1	30	
1,1-Dichloroethane	ug/L	1560	400	400	1790	1760	58	51	70-147	2	30	M1
1,1-Dichloroethene	ug/L	1130	400	400	1620	1590	124	115	70-158	2	30	
1,1-Dichloropropene	ug/L	ND	400	400	479	478	120	119	70-149	0	30	
1,2,3-Trichlorobenzene	ug/L	ND	400	400	395	399	99	100	68-140	1	30	
1,2,3-Trichloropropane	ug/L	ND	400	400	421	416	105	104	67-137	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	400	400	408	409	102	102	70-139	0	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	400	400	410	410	102	102	69-136	0	30	
1,2-Dibromoethane (EDB)	ug/L	ND	400	400	417	427	104	107	70-137	2	30	
1,2-Dichlorobenzene	ug/L	ND	400	400	423	415	106	104	70-133	2	30	
1,2-Dichloroethane	ug/L	ND	400	400	543	518	136	129	67-138	5	30	
1,2-Dichloropropane	ug/L	ND	400	400	447	454	112	114	70-138	2	30	
1,3-Dichlorobenzene	ug/L	ND	400	400	440	436	110	109	70-133	1	30	
1,3-Dichloropropane	ug/L	ND	400	400	454	446	113	111	70-136	2	30	
1,4-Dichlorobenzene	ug/L	ND	400	400	435	425	109	106	70-133	2	30	
2,2-Dichloropropane	ug/L	ND	400	400	445	461	111	115	52-155	3	30	
2-Butanone (MEK)	ug/L	ND	800	800	920	875	115	109	61-147	5	30	
2-Chlorotoluene	ug/L	ND	400	400	446	444	112	111	70-141	0	30	
2-Hexanone	ug/L	ND	800	800	831	811	104	101	67-139	3	30	
4-Chlorotoluene	ug/L	ND	400	400	441	433	110	108	70-135	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	800	800	831	820	104	102	67-136	1	30	
Acetone	ug/L	ND	800	800	973	939	122	117	55-159	4	30	
Benzene	ug/L	ND	400	400	444	447	111	112	67-150	1	30	
Bromobenzene	ug/L	ND	400	400	423	411	106	103	70-134	3	30	
Bromochloromethane	ug/L	ND	400	400	417	440	104	110	70-146	5	30	
Bromodichloromethane	ug/L	ND	400	400	391	402	98	100	70-138	3	30	
Bromoform	ug/L	ND	400	400	392	385	98	96	57-138	2	30	
Bromomethane	ug/L	ND	400	400	562	535	141	134	10-200	5	30	
Carbon tetrachloride	ug/L	ND	400	400	416	461	104	115	70-147	10	30	
Chlorobenzene	ug/L	ND	400	400	438	439	109	110	70-137	0	30	
Chloroethane	ug/L	ND	400	400	530	524	132	131	51-166	1	30	IK,v1
Chloroform	ug/L	ND	400	400	471	479	118	120	70-144	2	30	
Chloromethane	ug/L	ND	400	400	467	450	117	113	24-161	4	30	IK
cis-1,2-Dichloroethene	ug/L	ND	400	400	453	448	110	109	67-148	1	30	
cis-1,3-Dichloropropene	ug/L	ND	400	400	437	439	109	110	70-142	1	30	
Dibromochloromethane	ug/L	ND	400	400	417	420	104	105	68-138	1	30	
Dibromomethane	ug/L	ND	400	400	400	427	100	107	70-134	7	30	
Dichlorodifluoromethane	ug/L	ND	400	400	454	454	114	113	43-155	0	30	
Diisopropyl ether	ug/L	ND	400	400	432	424	108	106	65-146	2	30	
Ethylbenzene	ug/L	ND	400	400	447	446	112	112	68-143	0	30	
Hexachloro-1,3-butadiene	ug/L	ND	400	400	426	416	107	104	62-151	2	30	

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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.: 92507937

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3090279 3090280

Parameter	Units	92507937015 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	800	800	888	895	111	112	53-157	1	30	
Methyl-tert-butyl ether	ug/L	ND	400	400	399	404	100	101	59-156	1	30	
Methylene Chloride	ug/L	ND	400	400	493	486	123	122	64-148	1	30	
Naphthalene	ug/L	ND	400	400	392	385	98	96	57-150	2	30	
o-Xylene	ug/L	ND	400	400	453	450	113	113	68-143	1	30	
p-Isopropyltoluene	ug/L	ND	400	400	435	418	109	104	70-141	4	30	
Styrene	ug/L	ND	400	400	426	434	106	108	70-136	2	30	
Tetrachloroethene	ug/L	ND	400	400	452	462	113	116	70-139	2	30	
Toluene	ug/L	ND	400	400	439	441	110	110	47-157	0	30	
trans-1,2-Dichloroethene	ug/L	ND	400	400	444	465	111	116	70-149	4	30	
trans-1,3-Dichloropropene	ug/L	ND	400	400	419	422	105	106	70-138	1	30	
Trichloroethene	ug/L	ND	400	400	451	467	109	113	70-149	4	30	
Trichlorofluoromethane	ug/L	ND	400	400	469	455	117	114	61-154	3	30	
Vinyl acetate	ug/L	ND	800	800	989	957	124	120	48-156	3	30	
Vinyl chloride	ug/L	ND	400	400	392	387	98	97	55-172	1	30	
Xylene (Total)	ug/L	ND	1200	1200	1340	1350	112	112	66-145	0	30	
1,2-Dichloroethane-d4 (S)	%						111	110	70-130			
4-Bromofluorobenzene (S)	%						104	105	70-130			
Toluene-d8 (S)	%						97	99	70-130			

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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.: 92507937

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: 92507937002, 92507937003, 92507937004, 92507937005, 92507937006, 92507937008

METHOD BLANK: 3081850 Matrix: Water
Associated Lab Samples: 92507937002, 92507937003, 92507937004, 92507937005, 92507937006, 92507937008

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	

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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.: 92507937

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: 92507937001

METHOD BLANK: 3081855 Matrix: Water
Associated Lab Samples: 92507937001

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	

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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.: 92507937

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: 92507937007

METHOD BLANK: 3081862 Matrix: Water
Associated Lab Samples: 92507937007

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	

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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.: 92507937

QC Batch: 583085 Analysis Method: EPA 8260D Mod.
QC Batch Method: EPA 8260D Mod. Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507937009, 92507937010, 92507937011, 92507937012, 92507937014, 92507937015

METHOD BLANK: 3083365 Matrix: Water
Associated Lab Samples: 92507937009, 92507937010, 92507937011, 92507937012, 92507937014, 92507937015

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	

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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.: 92507937

QC Batch: 583589
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507937013

METHOD BLANK: 3085484 Matrix: Water
Associated Lab Samples: 92507937013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/01/20 12:52	
1,2-Dichloroethane-d4 (S)	%	101	70-130	12/01/20 12:52	
Toluene-d8 (S)	%	97	66-133	12/01/20 12:52	

LABORATORY CONTROL SAMPLE: 3085485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	18.3	91	70-130	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
Toluene-d8 (S)	%			95	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3085486 3085487

Parameter	Units	92507937013 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	151	50	50	211	206	119	110	64-141	2	30	
1,2-Dichloroethane-d4 (S)	%						103	99	70-130		30	
Toluene-d8 (S)	%						101	99	66-133		30	

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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.: 92507937

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
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(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Kop Flex
Pace Project No.: 92507937

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92507937001	**MW-43**	EPA 8260D	582948		
92507937002	**MW-39**	EPA 8260D	582948		
92507937003	**MW-18**	EPA 8260D	582948		
92507937004	**MW-5R**	EPA 8260D	582948		
92507937005	**MW-40D**	EPA 8260D	582948		
92507937006	**MW-1D**	EPA 8260D	582948		
92507937007	**MW-23D**	EPA 8260D	582948		
92507937008	**Trip Blank**	EPA 8260D	582948		
92507937009	**MW-38R**	EPA 8260D	583045		
92507937010	**MW-21D**	EPA 8260D	583045		
92507937011	**MW-22D**	EPA 8260D	583045		
92507937012	**MW-20**	EPA 8260D	583926		
92507937013	**MW-4**	EPA 8260D	583045		
92507937014	**MW-9**	EPA 8260D	583045		
92507937015	**MW-16**	EPA 8260D	584621		
92507937001	**MW-43**	EPA 8260D Mod.	582773		
92507937002	**MW-39**	EPA 8260D Mod.	582772		
92507937003	**MW-18**	EPA 8260D Mod.	582772		
92507937004	**MW-5R**	EPA 8260D Mod.	582772		
92507937005	**MW-40D**	EPA 8260D Mod.	582772		
92507937006	**MW-1D**	EPA 8260D Mod.	582772		
92507937007	**MW-23D**	EPA 8260D Mod.	582774		
92507937008	**Trip Blank**	EPA 8260D Mod.	582772		
92507937009	**MW-38R**	EPA 8260D Mod.	583085		
92507937010	**MW-21D**	EPA 8260D Mod.	583085		
92507937011	**MW-22D**	EPA 8260D Mod.	583085		
92507937012	**MW-20**	EPA 8260D Mod.	583085		
92507937013	**MW-4**	EPA 8260D Mod.	583589		
92507937014	**MW-9**	EPA 8260D Mod.	583085		
92507937015	**MW-16**	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: WSP

Project #: WO# : 92507937

92507937

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

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

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

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-38R, MW-21D, MW-22D, MW-20, MW-4, MW-9, MW-16 not present.

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: AMB **Date:** 11-24-2020

Project Manager SRF Review: AMB **Date:** 11-24-2020

***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# : 92507937**

PM: BV Due Date: 12/03/20

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													
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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#: 92507937
PM: BV Due Date: 12/03/20
CLIENT: 92-WSP

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

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

Date/Initials Person Examining Contents: 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? -Includes Date/Time/ID/Analysis Matrix: WT	☑ Yes	☐ No	☐ N/A	9.
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-38B, MW-2D, MW-22D, MW-29, MW-4, MW-8, MW-16

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 # **WO# : 92507937**

PM: BV **Due Date: 12/03/20**

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)
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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.

Onsite

CHAIN-OF-CUSTODY RECORD

WSP USA Office Address	13530 Dulles Technology Dr. Stc 500 Herndon VA
Project Name	Kapflex
WSP USA Contact Name	Molly Long
Project Location	Hanover, MD
WSP USA Contact E-mail	Molly.long @wsp.com
Project Number & Task	31401545.010/3
WSP USA Contact Phone	571 232 5045
Sampler(s) Name(s)	Molly Long, Elliott Martynkewicz
Sampler(s) Signature(s)	

Requested Analyses & Preservatives: VOCs 8260D; 1,4-Dioxane 8260D; 1,4 + SIMS

No. 010009

Laboratory Name & Location: Pace, NC

Laboratory Project Manager: Bonnie V.

Requested Turn-Around-Time: [X] Standard [ ] 24 HR [ ] 48 HR [ ] 72 HR [ ] ___ HR 92507937

	Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	Sample Comments
C	MW-43	AQ	11/22/2020		11	10	6	001
C	MW-39				11	25	6	002
C	MW-18				11	40	6	003
C	MW-5R				12	50	6	004
C	MW-40D				13	05	6	005
B	MW-38R				13	20	6	009
B	MW-21D				14	10	6	010
C	MW-1D				15	05	6	006
B	MW-22D				15	25	6	011
B	MW-20				15	35	6	012
B	MW-4				15	50	6	013
B	MW-9				16	05	6	014
C	MW-23D				16	55	6	007
B	MW-16				17	10	6	015
C	Trip Blank	Lab provided					2	008

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	11/23/20	1730	FedEx			FedEx	8160 4581 0292
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)

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

December 15, 2020

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

RE: Project: KopFlex
Pace Project No.: 92510474

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on December 09, 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: KopFlex
Pace Project No.: 92510474

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: KopFlex
Pace Project No.: 92510474

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92510474001	**DUP-120820**	Water	12/08/20 12:00	12/09/20 11:07
92510474002	**MW-45**	Water	12/08/20 13:30	12/09/20 11:07
92510474003	**MW-16D**	Water	12/08/20 13:45	12/09/20 11:07
92510474004	**Trip Blank**	Water	12/08/20 00:00	12/09/20 11:07

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

SAMPLE ANALYTE COUNT

Project: KopFlex
Pace Project No.: 92510474

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92510474001	**DUP-120820**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92510474002	**MW-45**	EPA 8260D	GAW	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92510474003	**MW-16D**	EPA 8260D	GAW	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92510474004	**Trip Blank**	EPA 8260D	GAW	63	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: KopFlex
Pace Project No.: 92510474

Sample: DUP-120820 **Lab ID: 92510474001** Collected: 12/08/20 12:00 Received: 12/09/20 11:07 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		12/14/20 14:19	67-64-1	
Benzene	ND	ug/L	1.0	1		12/14/20 14:19	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/14/20 14:19	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/14/20 14:19	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/14/20 14:19	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/14/20 14:19	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/14/20 14:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/14/20 14:19	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/14/20 14:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/14/20 14:19	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/14/20 14:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/14/20 14:19	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/14/20 14:19	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/14/20 14:19	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/14/20 14:19	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/14/20 14:19	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/14/20 14:19	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/14/20 14:19	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/14/20 14:19	75-71-8	
1,1-Dichloroethane	**24.4**	ug/L	1.0	1		12/14/20 14:19	75-34-3	
1,2-Dichloroethane	**1.7**	ug/L	1.0	1		12/14/20 14:19	107-06-2	
1,1-Dichloroethene	**108**	ug/L	1.0	1		12/14/20 14:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/14/20 14:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/14/20 14:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/14/20 14:19	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/14/20 14:19	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/14/20 14:19	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/14/20 14:19	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/14/20 14:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/14/20 14:19	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/14/20 14:19	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/14/20 14:19	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/14/20 14:19	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/14/20 14:19	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/14/20 14:19	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/14/20 14:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/14/20 14:19	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/14/20 14:19	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/14/20 14:19	91-20-3	
Styrene	ND	ug/L	1.0	1		12/14/20 14:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/14/20 14:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/14/20 14:19	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: KopFlex
Pace Project No.: 92510474

Sample: DUP-120820 **Lab ID: 92510474001** Collected: 12/08/20 12:00 Received: 12/09/20 11:07 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		12/14/20 14:19	127-18-4	
Toluene	ND	ug/L	1.0	1		12/14/20 14:19	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/14/20 14:19	120-82-1	
1,1,1-Trichloroethane	**8.9**	ug/L	1.0	1		12/14/20 14:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/14/20 14:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/14/20 14:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/14/20 14:19	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/14/20 14:19	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/14/20 14:19	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/14/20 14:19	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/14/20 14:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/14/20 14:19	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/14/20 14:19	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		12/14/20 14:19	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		12/14/20 14:19	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		12/14/20 14:19	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**118**	ug/L	5.0	2.5		12/10/20 15:39	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	2.5		12/10/20 15:39	17060-07-0	
Toluene-d8 (S)	89	%	66-133	2.5		12/10/20 15:39	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: KopFlex
Pace Project No.: 92510474

Sample: MW-45 **Lab ID: 92510474002** Collected: 12/08/20 13:30 Received: 12/09/20 11:07 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		12/10/20 12:33	67-64-1	
Benzene	ND	ug/L	1.0	1		12/10/20 12:33	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/10/20 12:33	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/10/20 12:33	74-97-5	M1,R1
Bromodichloromethane	ND	ug/L	1.0	1		12/10/20 12:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/10/20 12:33	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/10/20 12:33	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		12/10/20 12:33	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/10/20 12:33	56-23-5	M1
Chlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/10/20 12:33	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/10/20 12:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/10/20 12:33	74-87-3	v2
2-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 12:33	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 12:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/10/20 12:33	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/10/20 12:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/10/20 12:33	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/10/20 12:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/10/20 12:33	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/10/20 12:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/10/20 12:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/10/20 12:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 12:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 12:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 12:33	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/10/20 12:33	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 12:33	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/10/20 12:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 12:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 12:33	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/10/20 12:33	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/10/20 12:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/10/20 12:33	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/10/20 12:33	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/10/20 12:33	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/10/20 12:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/10/20 12:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/10/20 12:33	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/10/20 12:33	91-20-3	
Styrene	ND	ug/L	1.0	1		12/10/20 12:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 12:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 12:33	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: KopFlex
Pace Project No.: 92510474

Sample: MW-45 **Lab ID: 92510474002** Collected: 12/08/20 13:30 Received: 12/09/20 11:07 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		12/10/20 12:33	127-18-4	
Toluene	ND	ug/L	1.0	1		12/10/20 12:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 12:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/10/20 12:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/10/20 12:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/10/20 12:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/10/20 12:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/10/20 12:33	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/10/20 12:33	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/10/20 12:33	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/10/20 12:33	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/10/20 12:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/10/20 12:33	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		12/10/20 12:33	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		12/10/20 12:33	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		12/10/20 12:33	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		12/09/20 16:42	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		12/09/20 16:42	17060-07-0	
Toluene-d8 (S)	126	%	66-133	1		12/09/20 16:42	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: KopFlex
Pace Project No.: 92510474

Sample: MW-16D **Lab ID: 92510474003** Collected: 12/08/20 13:45 Received: 12/09/20 11:07 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		12/10/20 13:46	67-64-1	
Benzene	ND	ug/L	1.0	1		12/10/20 13:46	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/10/20 13:46	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/10/20 13:46	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/10/20 13:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/10/20 13:46	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/10/20 13:46	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		12/10/20 13:46	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/10/20 13:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/10/20 13:46	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/10/20 13:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/10/20 13:46	74-87-3	v2
2-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 13:46	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 13:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/10/20 13:46	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/10/20 13:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/10/20 13:46	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/10/20 13:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/10/20 13:46	75-71-8	
1,1-Dichloroethane	**25.9**	ug/L	1.0	1		12/10/20 13:46	75-34-3	
1,2-Dichloroethane	**1.6**	ug/L	1.0	1		12/10/20 13:46	107-06-2	
1,1-Dichloroethene	**127**	ug/L	1.0	1		12/10/20 13:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 13:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 13:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 13:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/10/20 13:46	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 13:46	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/10/20 13:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 13:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 13:46	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/10/20 13:46	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/10/20 13:46	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/10/20 13:46	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/10/20 13:46	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/10/20 13:46	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/10/20 13:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/10/20 13:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/10/20 13:46	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/10/20 13:46	91-20-3	
Styrene	ND	ug/L	1.0	1		12/10/20 13:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 13:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 13:46	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: KopFlex
Pace Project No.: 92510474

Sample: MW-16D **Lab ID: 92510474003** Collected: 12/08/20 13:45 Received: 12/09/20 11:07 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		12/10/20 13:46	127-18-4	
Toluene	ND	ug/L	1.0	1		12/10/20 13:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 13:46	120-82-1	
1,1,1-Trichloroethane	**10.1**	ug/L	1.0	1		12/10/20 13:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/10/20 13:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/10/20 13:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/10/20 13:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/10/20 13:46	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/10/20 13:46	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/10/20 13:46	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/10/20 13:46	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/10/20 13:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/10/20 13:46	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		12/10/20 13:46	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		12/10/20 13:46	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		12/10/20 13:46	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**105**	ug/L	5.0	2.5		12/09/20 17:01	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	2.5		12/09/20 17:01	17060-07-0	
Toluene-d8 (S)	88	%	66-133	2.5		12/09/20 17:01	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: KopFlex
Pace Project No.: 92510474

Sample: Trip Blank **Lab ID: 92510474004** Collected: 12/08/20 00:00 Received: 12/09/20 11:07 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		12/10/20 11:20	67-64-1	
Benzene	ND	ug/L	1.0	1		12/10/20 11:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/10/20 11:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/10/20 11:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/10/20 11:20	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/10/20 11:20	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/10/20 11:20	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		12/10/20 11:20	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/10/20 11:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/10/20 11:20	75-00-3	
Chloroform	ND	ug/L	5.0	1		12/10/20 11:20	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/10/20 11:20	74-87-3	v2
2-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 11:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/10/20 11:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		12/10/20 11:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/10/20 11:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/10/20 11:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/10/20 11:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/10/20 11:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/10/20 11:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/10/20 11:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/10/20 11:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 11:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/10/20 11:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 11:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/10/20 11:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/10/20 11:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/10/20 11:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 11:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/10/20 11:20	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/10/20 11:20	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		12/10/20 11:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/10/20 11:20	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/10/20 11:20	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/10/20 11:20	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		12/10/20 11:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/10/20 11:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/10/20 11:20	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/10/20 11:20	91-20-3	
Styrene	ND	ug/L	1.0	1		12/10/20 11:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 11:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/10/20 11:20	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: KopFlex
Pace Project No.: 92510474

Sample: Trip Blank **Lab ID: 92510474004** Collected: 12/08/20 00:00 Received: 12/09/20 11:07 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		12/10/20 11:20	127-18-4	
Toluene	ND	ug/L	1.0	1		12/10/20 11:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/10/20 11:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/10/20 11:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/10/20 11:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/10/20 11:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/10/20 11:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/10/20 11:20	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/10/20 11:20	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/10/20 11:20	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/10/20 11:20	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/10/20 11:20	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/10/20 11:20	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		12/10/20 11:20	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/10/20 11:20	17060-07-0	
Toluene-d8 (S)	103	%	70-130	1		12/10/20 11:20	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: KopFlex
Pace Project No.: 92510474

QC Batch: 585820
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92510474002, 92510474003, 92510474004

METHOD BLANK: 3096653 Matrix: Water
Associated Lab Samples: 92510474002, 92510474003, 92510474004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,1-Dichloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,1-Dichloroethene	ug/L	ND	1.0	12/10/20 11:02	
1,1-Dichloropropene	ug/L	ND	1.0	12/10/20 11:02	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/10/20 11:02	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/10/20 11:02	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/10/20 11:02	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
1,2-Dichloroethane	ug/L	ND	1.0	12/10/20 11:02	
1,2-Dichloropropane	ug/L	ND	1.0	12/10/20 11:02	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
1,3-Dichloropropane	ug/L	ND	1.0	12/10/20 11:02	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
2,2-Dichloropropane	ug/L	ND	1.0	12/10/20 11:02	
2-Butanone (MEK)	ug/L	ND	5.0	12/10/20 11:02	
2-Chlorotoluene	ug/L	ND	1.0	12/10/20 11:02	
2-Hexanone	ug/L	ND	5.0	12/10/20 11:02	
4-Chlorotoluene	ug/L	ND	1.0	12/10/20 11:02	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/10/20 11:02	
Acetone	ug/L	ND	25.0	12/10/20 11:02	
Benzene	ug/L	ND	1.0	12/10/20 11:02	
Bromobenzene	ug/L	ND	1.0	12/10/20 11:02	
Bromochloromethane	ug/L	ND	1.0	12/10/20 11:02	
Bromodichloromethane	ug/L	ND	1.0	12/10/20 11:02	
Bromoform	ug/L	ND	1.0	12/10/20 11:02	
Bromomethane	ug/L	ND	2.0	12/10/20 11:02	v2
Carbon tetrachloride	ug/L	ND	1.0	12/10/20 11:02	
Chlorobenzene	ug/L	ND	1.0	12/10/20 11:02	
Chloroethane	ug/L	ND	1.0	12/10/20 11:02	
Chloroform	ug/L	ND	5.0	12/10/20 11:02	
Chloromethane	ug/L	ND	1.0	12/10/20 11:02	v2
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/10/20 11:02	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/10/20 11:02	
Dibromochloromethane	ug/L	ND	1.0	12/10/20 11:02	
Dibromomethane	ug/L	ND	1.0	12/10/20 11:02	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

METHOD BLANK: 3096653 Matrix: Water
Associated Lab Samples: 92510474002, 92510474003, 92510474004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/10/20 11:02	
Diisopropyl ether	ug/L	ND	1.0	12/10/20 11:02	
Ethylbenzene	ug/L	ND	1.0	12/10/20 11:02	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/10/20 11:02	
m&p-Xylene	ug/L	ND	2.0	12/10/20 11:02	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/10/20 11:02	
Methylene Chloride	ug/L	ND	5.0	12/10/20 11:02	
Naphthalene	ug/L	ND	1.0	12/10/20 11:02	
o-Xylene	ug/L	ND	1.0	12/10/20 11:02	
p-Isopropyltoluene	ug/L	ND	1.0	12/10/20 11:02	
Styrene	ug/L	ND	1.0	12/10/20 11:02	
Tetrachloroethene	ug/L	ND	1.0	12/10/20 11:02	
Toluene	ug/L	ND	1.0	12/10/20 11:02	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/10/20 11:02	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/10/20 11:02	
Trichloroethene	ug/L	ND	1.0	12/10/20 11:02	
Trichlorofluoromethane	ug/L	ND	1.0	12/10/20 11:02	
Vinyl acetate	ug/L	ND	2.0	12/10/20 11:02	
Vinyl chloride	ug/L	ND	1.0	12/10/20 11:02	
Xylene (Total)	ug/L	ND	1.0	12/10/20 11:02	
1,2-Dichloroethane-d4 (S)	%	97	70-130	12/10/20 11:02	
4-Bromofluorobenzene (S)	%	99	70-130	12/10/20 11:02	
Toluene-d8 (S)	%	101	70-130	12/10/20 11:02	

LABORATORY CONTROL SAMPLE: 3096654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.8	104	70-130	
1,1,1-Trichloroethane	ug/L	50	47.6	95	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.4	101	70-130	
1,1,2-Trichloroethane	ug/L	50	50.4	101	70-130	
1,1-Dichloroethane	ug/L	50	44.8	90	70-130	
1,1-Dichloroethene	ug/L	50	47.3	95	70-132	
1,1-Dichloropropene	ug/L	50	45.3	91	70-131	
1,2,3-Trichlorobenzene	ug/L	50	52.6	105	70-134	
1,2,3-Trichloropropane	ug/L	50	48.1	96	70-130	
1,2,4-Trichlorobenzene	ug/L	50	51.8	104	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.2	102	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	52.4	105	70-130	
1,2-Dichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dichloroethane	ug/L	50	47.0	94	70-130	
1,2-Dichloropropane	ug/L	50	48.0	96	70-130	
1,3-Dichlorobenzene	ug/L	50	51.2	102	70-130	
1,3-Dichloropropane	ug/L	50	51.4	103	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

LABORATORY CONTROL SAMPLE: 3096654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.3	101	70-130	
2,2-Dichloropropane	ug/L	50	47.0	94	70-130	
2-Butanone (MEK)	ug/L	100	93.4	93	70-133	
2-Chlorotoluene	ug/L	50	50.9	102	70-130	
2-Hexanone	ug/L	100	102	102	70-130	
4-Chlorotoluene	ug/L	50	49.0	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.2	93	70-130	
Acetone	ug/L	100	99.6	100	70-144	
Benzene	ug/L	50	46.1	92	70-130	
Bromobenzene	ug/L	50	49.1	98	70-130	
Bromochloromethane	ug/L	50	46.6	93	70-130	
Bromodichloromethane	ug/L	50	47.5	95	70-130	
Bromoform	ug/L	50	45.7	91	70-131	
Bromomethane	ug/L	50	39.2	78	30-177	v3
Carbon tetrachloride	ug/L	50	50.8	102	70-130	
Chlorobenzene	ug/L	50	50.5	101	70-130	
Chloroethane	ug/L	50	41.2	82	46-131	
Chloroform	ug/L	50	47.8	96	70-130	
Chloromethane	ug/L	50	29.3	59	49-130	v3
cis-1,2-Dichloroethene	ug/L	50	44.0	88	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.2	96	70-130	
Dibromochloromethane	ug/L	50	49.3	99	70-130	
Dibromomethane	ug/L	50	50.8	102	70-130	
Dichlorodifluoromethane	ug/L	50	41.1	82	52-134	
Diisopropyl ether	ug/L	50	42.0	84	70-131	
Ethylbenzene	ug/L	50	50.2	100	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.1	104	70-131	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	46.3	93	70-130	
Methylene Chloride	ug/L	50	43.7	87	68-130	
Naphthalene	ug/L	50	54.7	109	70-133	
o-Xylene	ug/L	50	51.0	102	70-130	
p-Isopropyltoluene	ug/L	50	51.0	102	70-130	
Styrene	ug/L	50	51.3	103	70-130	
Tetrachloroethene	ug/L	50	50.8	102	70-130	
Toluene	ug/L	50	46.6	93	70-130	
trans-1,2-Dichloroethene	ug/L	50	46.4	93	70-130	
trans-1,3-Dichloropropene	ug/L	50	48.5	97	70-130	
Trichloroethene	ug/L	50	48.4	97	70-130	
Trichlorofluoromethane	ug/L	50	44.0	88	61-130	
Vinyl acetate	ug/L	100	103	103	70-140	
Vinyl chloride	ug/L	50	40.8	82	59-142	
Xylene (Total)	ug/L	150	152	101	70-130	
1,2-Dichloroethane-d4 (S)	%			91	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			98	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3096655 3096656

Parameter	Units	92510474002 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	21.6	21.2	108	106	70-135	2	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	20.1	21.1	100	105	70-148	5	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	21.1	20.8	105	104	70-131	1	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	21.4	21.9	107	109	70-136	2	30	
1,1-Dichloroethane	ug/L	ND	20	20	19.1	19.3	95	96	70-147	1	30	
1,1-Dichloroethene	ug/L	ND	20	20	20.5	20.9	102	104	70-158	2	30	
1,1-Dichloropropene	ug/L	ND	20	20	19.8	19.8	99	99	70-149	0	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	21.1	22.1	105	111	68-140	5	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	20.2	20.2	101	101	67-137	0	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	21.1	22.8	106	114	70-139	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	22.1	23.4	110	117	69-136	6	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	21.0	22.0	105	110	70-137	4	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	21.2	22.0	106	110	70-133	4	30	
1,2-Dichloroethane	ug/L	ND	20	20	18.7	19.3	94	97	67-138	3	30	
1,2-Dichloropropane	ug/L	ND	20	20	20.0	20.9	100	105	70-138	4	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	21.7	22.1	109	110	70-133	2	30	
1,3-Dichloropropane	ug/L	ND	20	20	21.5	20.7	107	103	70-136	4	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	21.2	21.8	106	109	70-133	3	30	
2,2-Dichloropropane	ug/L	ND	20	20	20.4	20.9	102	104	52-155	2	30	
2-Butanone (MEK)	ug/L	ND	40	40	42.0	39.6	105	99	61-147	6	30	
2-Chlorotoluene	ug/L	ND	20	20	22.0	22.4	110	112	70-141	2	30	
2-Hexanone	ug/L	ND	40	40	43.9	41.8	110	105	67-139	5	30	
4-Chlorotoluene	ug/L	ND	20	20	21.3	21.9	106	109	70-135	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	38.9	38.4	97	96	67-136	1	30	
Acetone	ug/L	ND	40	40	42.1	40.7	105	102	55-159	3	30	
Benzene	ug/L	ND	20	20	20.1	20.2	100	101	67-150	1	30	
Bromobenzene	ug/L	ND	20	20	20.4	21.1	102	106	70-134	3	30	
Bromochloromethane	ug/L	ND	20	20	10.8	19.7	54	99	70-146	59	30	M1,R1, v3
Bromodichloromethane	ug/L	ND	20	20	20.1	20.3	101	102	70-138	1	30	
Bromoform	ug/L	ND	20	20	21.7	22.8	109	114	57-138	5	30	
Bromomethane	ug/L	ND	20	20	15.9	17.2	79	86	10-200	8	30	
Carbon tetrachloride	ug/L	ND	20	20	13.2	11.4	66	57	70-147	15	30	M1
Chlorobenzene	ug/L	ND	20	20	21.4	21.6	107	108	70-137	1	30	
Chloroethane	ug/L	ND	20	20	17.3	17.2	86	86	51-166	0	30	
Chloroform	ug/L	ND	20	20	19.8	19.8	99	99	70-144	0	30	
Chloromethane	ug/L	ND	20	20	13.1	16.5	66	82	24-161	23	30	v3
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.8	19.4	94	97	67-148	3	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.4	20.9	102	105	70-142	3	30	
Dibromochloromethane	ug/L	ND	20	20	21.4	22.1	107	111	68-138	3	30	
Dibromomethane	ug/L	ND	20	20	21.1	22.3	105	112	70-134	6	30	
Dichlorodifluoromethane	ug/L	ND	20	20	16.5	16.9	83	85	43-155	2	30	
Diisopropyl ether	ug/L	ND	20	20	16.5	17.2	83	86	65-146	4	30	
Ethylbenzene	ug/L	ND	20	20	21.2	21.8	106	109	68-143	3	30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3096655 3096656

Parameter	Units	92510474002 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	22.8	23.6	114	118	62-151	4	30	v1
m&p-Xylene	ug/L	ND	40	40	42.7	42.8	107	107	53-157	0	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	18.3	18.8	91	94	59-156	3	30	
Methylene Chloride	ug/L	ND	20	20	18.2	18.7	91	93	64-148	3	30	
Naphthalene	ug/L	ND	20	20	20.9	22.4	104	112	57-150	7	30	
o-Xylene	ug/L	ND	20	20	21.0	21.8	105	109	68-143	4	30	
p-Isopropyltoluene	ug/L	ND	20	20	22.3	22.9	111	114	70-141	3	30	
Styrene	ug/L	ND	20	20	21.5	21.9	108	109	70-136	2	30	
Tetrachloroethene	ug/L	ND	20	20	21.9	22.1	109	111	70-139	1	30	
Toluene	ug/L	ND	20	20	20.1	20.0	100	100	47-157	0	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.6	20.0	98	100	70-149	2	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	21.4	21.5	107	107	70-138	0	30	
Trichloroethene	ug/L	ND	20	20	20.9	20.9	104	105	70-149	0	30	
Trichlorofluoromethane	ug/L	ND	20	20	20.0	19.4	100	97	61-154	3	30	
Vinyl acetate	ug/L	ND	40	40	40.0	40.3	100	101	48-156	1	30	
Vinyl chloride	ug/L	ND	20	20	17.4	16.9	87	84	55-172	3	30	
Xylene (Total)	ug/L	ND	60	60	63.7	64.6	106	108	66-145	1	30	
1,2-Dichloroethane-d4 (S)	%						92	92	70-130			
4-Bromofluorobenzene (S)	%						102	101	70-130			
Toluene-d8 (S)	%						99	98	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

QC Batch: 586572
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92510474001

METHOD BLANK: 3100422 Matrix: Water
Associated Lab Samples: 92510474001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,1-Dichloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,1-Dichloroethene	ug/L	ND	1.0	12/14/20 12:11	
1,1-Dichloropropene	ug/L	ND	1.0	12/14/20 12:11	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/14/20 12:11	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/14/20 12:11	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/14/20 12:11	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
1,2-Dichloroethane	ug/L	ND	1.0	12/14/20 12:11	
1,2-Dichloropropane	ug/L	ND	1.0	12/14/20 12:11	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
1,3-Dichloropropane	ug/L	ND	1.0	12/14/20 12:11	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
2,2-Dichloropropane	ug/L	ND	1.0	12/14/20 12:11	
2-Butanone (MEK)	ug/L	ND	5.0	12/14/20 12:11	
2-Chlorotoluene	ug/L	ND	1.0	12/14/20 12:11	
2-Hexanone	ug/L	ND	5.0	12/14/20 12:11	
4-Chlorotoluene	ug/L	ND	1.0	12/14/20 12:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/14/20 12:11	
Acetone	ug/L	ND	25.0	12/14/20 12:11	
Benzene	ug/L	ND	1.0	12/14/20 12:11	
Bromobenzene	ug/L	ND	1.0	12/14/20 12:11	
Bromochloromethane	ug/L	ND	1.0	12/14/20 12:11	
Bromodichloromethane	ug/L	ND	1.0	12/14/20 12:11	
Bromoform	ug/L	ND	1.0	12/14/20 12:11	
Bromomethane	ug/L	ND	2.0	12/14/20 12:11	
Carbon tetrachloride	ug/L	ND	1.0	12/14/20 12:11	
Chlorobenzene	ug/L	ND	1.0	12/14/20 12:11	
Chloroethane	ug/L	ND	1.0	12/14/20 12:11	
Chloroform	ug/L	ND	5.0	12/14/20 12:11	
Chloromethane	ug/L	ND	1.0	12/14/20 12:11	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/14/20 12:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/14/20 12:11	
Dibromochloromethane	ug/L	ND	1.0	12/14/20 12:11	
Dibromomethane	ug/L	ND	1.0	12/14/20 12:11	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

METHOD BLANK: 3100422 Matrix: Water
Associated Lab Samples: 92510474001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/14/20 12:11	
Diisopropyl ether	ug/L	ND	1.0	12/14/20 12:11	
Ethylbenzene	ug/L	ND	1.0	12/14/20 12:11	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/14/20 12:11	
m&p-Xylene	ug/L	ND	2.0	12/14/20 12:11	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/14/20 12:11	
Methylene Chloride	ug/L	ND	5.0	12/14/20 12:11	
Naphthalene	ug/L	ND	1.0	12/14/20 12:11	
o-Xylene	ug/L	ND	1.0	12/14/20 12:11	
p-Isopropyltoluene	ug/L	ND	1.0	12/14/20 12:11	
Styrene	ug/L	ND	1.0	12/14/20 12:11	
Tetrachloroethene	ug/L	ND	1.0	12/14/20 12:11	
Toluene	ug/L	ND	1.0	12/14/20 12:11	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/14/20 12:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/14/20 12:11	
Trichloroethene	ug/L	ND	1.0	12/14/20 12:11	
Trichlorofluoromethane	ug/L	ND	1.0	12/14/20 12:11	
Vinyl acetate	ug/L	ND	2.0	12/14/20 12:11	
Vinyl chloride	ug/L	ND	1.0	12/14/20 12:11	
Xylene (Total)	ug/L	ND	1.0	12/14/20 12:11	
1,2-Dichloroethane-d4 (S)	%	99	70-130	12/14/20 12:11	
4-Bromofluorobenzene (S)	%	100	70-130	12/14/20 12:11	
Toluene-d8 (S)	%	102	70-130	12/14/20 12:11	

LABORATORY CONTROL SAMPLE: 3100423

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.1	98	70-130	
1,1,1-Trichloroethane	ug/L	50	44.9	90	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.7	99	70-130	
1,1,2-Trichloroethane	ug/L	50	47.6	95	70-130	
1,1-Dichloroethane	ug/L	50	42.3	85	70-130	
1,1-Dichloroethene	ug/L	50	45.8	92	70-132	
1,1-Dichloropropene	ug/L	50	43.0	86	70-131	
1,2,3-Trichlorobenzene	ug/L	50	53.1	106	70-134	
1,2,3-Trichloropropane	ug/L	50	47.3	95	70-130	
1,2,4-Trichlorobenzene	ug/L	50	52.7	105	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.4	101	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	51.0	102	70-130	
1,2-Dichlorobenzene	ug/L	50	47.3	95	70-130	
1,2-Dichloroethane	ug/L	50	43.9	88	70-130	
1,2-Dichloropropane	ug/L	50	43.7	87	70-130	
1,3-Dichlorobenzene	ug/L	50	47.5	95	70-130	
1,3-Dichloropropane	ug/L	50	49.6	99	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

LABORATORY CONTROL SAMPLE: 3100423

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	46.0	92	70-130	
2,2-Dichloropropane	ug/L	50	43.7	87	70-130	
2-Butanone (MEK)	ug/L	100	96.2	96	70-133	
2-Chlorotoluene	ug/L	50	46.8	94	70-130	
2-Hexanone	ug/L	100	103	103	70-130	
4-Chlorotoluene	ug/L	50	44.9	90	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.7	90	70-130	
Acetone	ug/L	100	105	105	70-144	
Benzene	ug/L	50	44.0	88	70-130	
Bromobenzene	ug/L	50	45.1	90	70-130	
Bromochloromethane	ug/L	50	43.3	87	70-130	
Bromodichloromethane	ug/L	50	45.6	91	70-130	
Bromoform	ug/L	50	52.5	105	70-131	
Bromomethane	ug/L	50	40.7	81	30-177	
Carbon tetrachloride	ug/L	50	46.5	93	70-130	
Chlorobenzene	ug/L	50	48.3	97	70-130	
Chloroethane	ug/L	50	40.1	80	46-131	
Chloroform	ug/L	50	45.5	91	70-130	
Chloromethane	ug/L	50	33.3	67	49-130	
cis-1,2-Dichloroethene	ug/L	50	41.4	83	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.8	96	70-130	
Dibromochloromethane	ug/L	50	49.6	99	70-130	
Dibromomethane	ug/L	50	48.9	98	70-130	
Dichlorodifluoromethane	ug/L	50	37.9	76	52-134	
Diisopropyl ether	ug/L	50	39.6	79	70-131	
Ethylbenzene	ug/L	50	47.5	95	70-130	
Hexachloro-1,3-butadiene	ug/L	50	53.1	106	70-131	
m&p-Xylene	ug/L	100	96.1	96	70-130	
Methyl-tert-butyl ether	ug/L	50	45.6	91	70-130	
Methylene Chloride	ug/L	50	43.0	86	68-130	
Naphthalene	ug/L	50	52.8	106	70-133	
o-Xylene	ug/L	50	48.5	97	70-130	
p-Isopropyltoluene	ug/L	50	47.4	95	70-130	
Styrene	ug/L	50	48.8	98	70-130	
Tetrachloroethene	ug/L	50	49.0	98	70-130	
Toluene	ug/L	50	44.4	89	70-130	
trans-1,2-Dichloroethene	ug/L	50	45.0	90	70-130	
trans-1,3-Dichloropropene	ug/L	50	49.6	99	70-130	
Trichloroethene	ug/L	50	45.0	90	70-130	
Trichlorofluoromethane	ug/L	50	41.9	84	61-130	
Vinyl acetate	ug/L	100	96.3	96	70-140	
Vinyl chloride	ug/L	50	37.2	74	59-142	
Xylene (Total)	ug/L	150	145	96	70-130	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			98	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3100424 3100425

Parameter	Units	92510407021 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	25.0	19.1	125	96	70-135	26	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	24.4	19.6	122	98	70-148	22	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	23.7	19.1	118	96	70-131	21	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	23.5	18.3	117	91	70-136	25	30	
1,1-Dichloroethane	ug/L	ND	20	20	24.2	19.3	121	97	70-147	22	30	
1,1-Dichloroethene	ug/L	ND	20	20	26.2	20.6	131	103	70-158	24	30	
1,1-Dichloropropene	ug/L	ND	20	20	25.1	19.2	126	96	70-149	27	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	23.2	18.2	116	91	68-140	24	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	23.8	19.2	119	96	67-137	22	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	24.0	19.2	120	96	70-139	22	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	24.6	19.3	123	97	69-136	24	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	24.2	19.2	121	96	70-137	23	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	24.5	18.6	122	93	70-133	27	30	
1,2-Dichloroethane	ug/L	ND	20	20	23.3	17.9	117	90	67-138	26	30	
1,2-Dichloropropane	ug/L	ND	20	20	25.5	20.0	128	100	70-138	24	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	24.4	18.8	122	94	70-133	26	30	
1,3-Dichloropropane	ug/L	ND	20	20	24.0	18.6	120	93	70-136	25	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	23.2	18.8	116	94	70-133	21	30	
2,2-Dichloropropane	ug/L	ND	20	20	29.3	23.2	147	116	52-155	23	30	
2-Butanone (MEK)	ug/L	ND	40	40	48.2	36.6	120	92	61-147	27	30	
2-Chlorotoluene	ug/L	ND	20	20	25.4	21.0	127	105	70-141	19	30	
2-Hexanone	ug/L	ND	40	40	49.9	38.8	125	97	67-139	25	30	
4-Chlorotoluene	ug/L	ND	20	20	24.3	19.4	121	97	70-135	22	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	48.5	37.1	121	93	67-136	27	30	
Acetone	ug/L	ND	40	40	50.6	37.5	127	94	55-159	30	30	
Benzene	ug/L	ND	20	20	24.1	19.0	121	95	67-150	24	30	
Bromobenzene	ug/L	ND	20	20	23.7	18.8	119	94	70-134	23	30	
Bromochloromethane	ug/L	ND	20	20	26.0	21.0	130	105	70-146	21	30	
Bromodichloromethane	ug/L	ND	20	20	23.2	18.0	116	90	70-138	26	30	
Bromoform	ug/L	ND	20	20	22.4	17.3	112	86	57-138	26	30	
Bromomethane	ug/L	ND	20	20	28.3	22.2	141	111	10-200	24	30	IK
Carbon tetrachloride	ug/L	ND	20	20	25.1	19.9	125	100	70-147	23	30	
Chlorobenzene	ug/L	ND	20	20	24.3	19.7	121	98	70-137	21	30	
Chloroethane	ug/L	ND	20	20	22.2	17.1	111	85	51-166	26	30	
Chloroform	ug/L	ND	20	20	24.7	20.0	124	100	70-144	21	30	
Chloromethane	ug/L	ND	20	20	24.7	19.6	123	98	24-161	23	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	23.7	18.7	118	93	67-148	24	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	25.2	19.2	126	96	70-142	27	30	
Dibromochloromethane	ug/L	ND	20	20	24.4	19.5	122	98	68-138	22	30	
Dibromomethane	ug/L	ND	20	20	24.4	18.7	122	94	70-134	26	30	
Dichlorodifluoromethane	ug/L	ND	20	20	20.6	16.7	103	84	43-155	21	30	
Diisopropyl ether	ug/L	ND	20	20	22.6	18.1	113	90	65-146	22	30	
Ethylbenzene	ug/L	ND	20	20	23.9	18.8	119	94	68-143	24	30	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	24.8	20.2	124	101	62-151	20	30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3100424 3100425

Parameter	Units	92510407021 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	48.2	38.6	120	97	53-157	22	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	22.7	18.0	113	90	59-156	23	30	
Methylene Chloride	ug/L	ND	20	20	23.0	19.2	115	96	64-148	18	30	
Naphthalene	ug/L	ND	20	20	23.6	18.7	118	93	57-150	23	30	
o-Xylene	ug/L	ND	20	20	23.6	18.8	118	94	68-143	23	30	
p-Isopropyltoluene	ug/L	ND	20	20	24.9	19.6	125	98	70-141	24	30	
Styrene	ug/L	ND	20	20	23.4	17.9	117	89	70-136	27	30	
Tetrachloroethene	ug/L	1.4	20	20	24.7	20.7	116	96	70-139	18	30	
Toluene	ug/L	ND	20	20	24.4	19.3	122	97	47-157	23	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	24.5	19.0	122	95	70-149	25	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	25.6	19.5	128	97	70-138	27	30	
Trichloroethene	ug/L	ND	20	20	24.0	18.8	120	94	70-149	25	30	
Trichlorofluoromethane	ug/L	ND	20	20	23.3	18.6	117	93	61-154	22	30	
Vinyl acetate	ug/L	ND	40	40	52.7	41.1	132	103	48-156	25	30	
Vinyl chloride	ug/L	ND	20	20	22.4	17.7	112	89	55-172	23	30	
Xylene (Total)	ug/L	ND	60	60	71.8	57.4	120	96	66-145	22	30	
1,2-Dichloroethane-d4 (S)	%						98	98	70-130			
4-Bromofluorobenzene (S)	%						102	103	70-130			
Toluene-d8 (S)	%						100	101	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

QC Batch: 585780
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92510474002, 92510474003

METHOD BLANK: 3096253 Matrix: Water
Associated Lab Samples: 92510474002, 92510474003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/09/20 15:24	
1,2-Dichloroethane-d4 (S)	%	99	70-130	12/09/20 15:24	
Toluene-d8 (S)	%	77	66-133	12/09/20 15:24	

LABORATORY CONTROL SAMPLE: 3096254

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	21.7	108	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
Toluene-d8 (S)	%			122	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3097528 3097529

Parameter	Units	92510474002 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)	%						96	98	70-130		30	
Toluene-d8 (S)	%						97	73	66-133		30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: KopFlex
Pace Project No.: 92510474

QC Batch: 586140
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92510474001

METHOD BLANK: 3098144 Matrix: Water
Associated Lab Samples: 92510474001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/10/20 15:20	
1,2-Dichloroethane-d4 (S)	%	99	70-130	12/10/20 15:20	
Toluene-d8 (S)	%	100	66-133	12/10/20 15:20	

LABORATORY CONTROL SAMPLE: 3098145

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	19.9	100	70-130	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
Toluene-d8 (S)	%			75	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3098146 3098147

Parameter	Units	92510474001 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	118	50	50	182	173	129	111	64-141	5	30	
1,2-Dichloroethane-d4 (S)	%						96	98	70-130		30	
Toluene-d8 (S)	%						74	111	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: KopFlex
Pace Project No.: 92510474

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.
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
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KopFlex
Pace Project No.: 92510474

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92510474001	**DUP-120820**	EPA 8260D	586572		
92510474002	**MW-45**	EPA 8260D	585820		
92510474003	**MW-16D**	EPA 8260D	585820		
92510474004	**Trip Blank**	EPA 8260D	585820		
92510474001	**DUP-120820**	EPA 8260D Mod.	586140		
92510474002	**MW-45**	EPA 8260D Mod.	585780		
92510474003	**MW-16D**	EPA 8260D Mod.	585780		

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

Sample Condition Upon Receipt

Client Name: KapFlex

Project #: WO# : 92510474

92510474

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

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

Date/Initials Person Examining Contents: ZT 12/9/20

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: 0.9 **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): 0.8

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? -Includes Date/Time/ID/Analysis Matrix: WT	☒ Yes	☐ No	☐ N/A	9.
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 bottles**

Project # **WO#: 92510474**

PM: BV Due Date: 12/16/20

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																5													
2																6													
3																6													
4																2													
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.

onsite

CHAIN-OF-CUSTODY RECORD

WSP USA Office Address: 13530 DULLES TECHNOLOGY DR STE 300 HERNDON VA 20171

No. 10577

WSP

Project Name	WSP USA Contact Name
Kopflex	MOLLY LONG
Project Location	**WSP USA Contact E-mail**
HANOVER, MD	MOLLY.LONG @wsp.com
Project Number & Task	**WSP USA Contact Phone**
31401545.010/3	703 709 6500
Sampler(s) Name(s)	**Sampler(s) Signature(s)**
MOLLY LONG	MM

Laboratory Name & Location: PACE, NC

Laboratory Project Manager: BONNIE V.

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

925104774

Requested Analyses & Preservatives

Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	VOC (8260D)	8260-1,4-Dioxane with SIMS	Sample Comments
DUP-120820	AQ	12/8/20		12	00	6	X	X	001
MW-45	AQ	12/8/20		13	30	6	X	X	002
MW-16D	AQ	12/8/20		13	45	6	X	X	003
TRIP BLANK	—	LAB PROVIDED				2	X		004

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
MM	12/8/20	1700	PACE HNL	12/9/20	1107	Fedex	812781795199
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)

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

January 11, 2021

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

RE: Project: Kop Flex
Pace Project No.: 92515248

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on January 07, 2021. 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.: 92515248

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
Pace Project No.: 92515248

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92515248001	**MW-42**	Water	01/06/21 11:45	01/07/21 10:52
92515248002	**Trip Blank**	Water	01/06/21 00:00	01/07/21 10:52

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Kop Flex
Pace Project No.: 92515248

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92515248001	**MW-42**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92515248002	**Trip Blank**	EPA 8260D	CL	63	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.: 92515248

Sample: MW-42 **Lab ID: 92515248001** Collected: 01/06/21 11:45 Received: 01/07/21 10:52 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		01/08/21 01:59	67-64-1	
Benzene	ND	ug/L	1.0	1		01/08/21 01:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		01/08/21 01:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		01/08/21 01:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/21 01:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/21 01:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		01/08/21 01:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		01/08/21 01:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/21 01:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/21 01:59	75-00-3	IL
Chloroform	ND	ug/L	5.0	1		01/08/21 01:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/21 01:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		01/08/21 01:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		01/08/21 01:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		01/08/21 01:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/21 01:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		01/08/21 01:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		01/08/21 01:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		01/08/21 01:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/21 01:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/21 01:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		01/08/21 01:59	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		01/08/21 01:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		01/08/21 01:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		01/08/21 01:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		01/08/21 01:59	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		01/08/21 01:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		01/08/21 01:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		01/08/21 01:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		01/08/21 01:59	91-20-3	
Styrene	ND	ug/L	1.0	1		01/08/21 01:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/21 01:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/21 01:59	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.: 92515248

Sample: MW-42 **Lab ID: 92515248001** Collected: 01/06/21 11:45 Received: 01/07/21 10:52 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		01/08/21 01:59	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/21 01:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/21 01:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/21 01:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/21 01:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/21 01:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/21 01:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		01/08/21 01:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		01/08/21 01:59	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		01/08/21 01:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		01/08/21 01:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/21 01:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		01/08/21 01:59	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		01/08/21 01:59	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		01/08/21 01:59	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**13.2**	ug/L	2.0	1		01/07/21 17:51	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		01/07/21 17:51	17060-07-0	
Toluene-d8 (S)	104	%	66-133	1		01/07/21 17:51	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
Pace Project No.: 92515248

Sample: Trip Blank **Lab ID: 92515248002** Collected: 01/06/21 00:00 Received: 01/07/21 10:52 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		01/08/21 01:05	67-64-1	
Benzene	ND	ug/L	1.0	1		01/08/21 01:05	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		01/08/21 01:05	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		01/08/21 01:05	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		01/08/21 01:05	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/08/21 01:05	75-25-2	
Bromomethane	ND	ug/L	2.0	1		01/08/21 01:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		01/08/21 01:05	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		01/08/21 01:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/08/21 01:05	75-00-3	IL
Chloroform	ND	ug/L	5.0	1		01/08/21 01:05	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/08/21 01:05	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		01/08/21 01:05	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		01/08/21 01:05	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		01/08/21 01:05	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		01/08/21 01:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		01/08/21 01:05	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		01/08/21 01:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		01/08/21 01:05	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/08/21 01:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/08/21 01:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/08/21 01:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:05	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:05	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		01/08/21 01:05	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/08/21 01:05	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		01/08/21 01:05	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		01/08/21 01:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		01/08/21 01:05	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		01/08/21 01:05	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		01/08/21 01:05	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		01/08/21 01:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		01/08/21 01:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		01/08/21 01:05	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		01/08/21 01:05	91-20-3	
Styrene	ND	ug/L	1.0	1		01/08/21 01:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/21 01:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/08/21 01:05	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.: 92515248

Sample: Trip Blank **Lab ID: 92515248002** Collected: 01/06/21 00:00 Received: 01/07/21 10:52 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		01/08/21 01:05	127-18-4	
Toluene	ND	ug/L	1.0	1		01/08/21 01:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		01/08/21 01:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/08/21 01:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/08/21 01:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/08/21 01:05	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/08/21 01:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/08/21 01:05	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		01/08/21 01:05	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		01/08/21 01:05	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		01/08/21 01:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		01/08/21 01:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/08/21 01:05	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		01/08/21 01:05	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		01/08/21 01:05	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		01/08/21 01:05	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.: 92515248

QC Batch: 591349
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92515248001, 92515248002

METHOD BLANK: 3121997
Matrix: Water
Associated Lab Samples: 92515248001, 92515248002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,1,1-Trichloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,1-Dichloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,1-Dichloroethene	ug/L	ND	1.0	01/08/21 00:46	
1,1-Dichloropropene	ug/L	ND	1.0	01/08/21 00:46	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/08/21 00:46	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	01/08/21 00:46	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	01/08/21 00:46	
1,2-Dichlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
1,2-Dichloroethane	ug/L	ND	1.0	01/08/21 00:46	
1,2-Dichloropropane	ug/L	ND	1.0	01/08/21 00:46	
1,3-Dichlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
1,3-Dichloropropane	ug/L	ND	1.0	01/08/21 00:46	
1,4-Dichlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
2,2-Dichloropropane	ug/L	ND	1.0	01/08/21 00:46	
2-Butanone (MEK)	ug/L	ND	5.0	01/08/21 00:46	
2-Chlorotoluene	ug/L	ND	1.0	01/08/21 00:46	
2-Hexanone	ug/L	ND	5.0	01/08/21 00:46	
4-Chlorotoluene	ug/L	ND	1.0	01/08/21 00:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	01/08/21 00:46	
Acetone	ug/L	ND	25.0	01/08/21 00:46	
Benzene	ug/L	ND	1.0	01/08/21 00:46	
Bromobenzene	ug/L	ND	1.0	01/08/21 00:46	
Bromochloromethane	ug/L	ND	1.0	01/08/21 00:46	
Bromodichloromethane	ug/L	ND	1.0	01/08/21 00:46	
Bromoform	ug/L	ND	1.0	01/08/21 00:46	
Bromomethane	ug/L	ND	2.0	01/08/21 00:46	
Carbon tetrachloride	ug/L	ND	1.0	01/08/21 00:46	
Chlorobenzene	ug/L	ND	1.0	01/08/21 00:46	
Chloroethane	ug/L	ND	1.0	01/08/21 00:46	IL
Chloroform	ug/L	ND	5.0	01/08/21 00:46	
Chloromethane	ug/L	ND	1.0	01/08/21 00:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/08/21 00:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/08/21 00:46	
Dibromochloromethane	ug/L	ND	1.0	01/08/21 00:46	
Dibromomethane	ug/L	ND	1.0	01/08/21 00:46	

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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.: 92515248

METHOD BLANK: 3121997 Matrix: Water
Associated Lab Samples: 92515248001, 92515248002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	01/08/21 00:46	
Diisopropyl ether	ug/L	ND	1.0	01/08/21 00:46	
Ethylbenzene	ug/L	ND	1.0	01/08/21 00:46	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	01/08/21 00:46	
m&p-Xylene	ug/L	ND	2.0	01/08/21 00:46	
Methyl-tert-butyl ether	ug/L	ND	1.0	01/08/21 00:46	
Methylene Chloride	ug/L	ND	5.0	01/08/21 00:46	
Naphthalene	ug/L	ND	1.0	01/08/21 00:46	
o-Xylene	ug/L	ND	1.0	01/08/21 00:46	
p-Isopropyltoluene	ug/L	ND	1.0	01/08/21 00:46	
Styrene	ug/L	ND	1.0	01/08/21 00:46	
Tetrachloroethene	ug/L	ND	1.0	01/08/21 00:46	
Toluene	ug/L	ND	1.0	01/08/21 00:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/08/21 00:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/08/21 00:46	
Trichloroethene	ug/L	ND	1.0	01/08/21 00:46	
Trichlorofluoromethane	ug/L	ND	1.0	01/08/21 00:46	
Vinyl acetate	ug/L	ND	2.0	01/08/21 00:46	
Vinyl chloride	ug/L	ND	1.0	01/08/21 00:46	
Xylene (Total)	ug/L	ND	1.0	01/08/21 00:46	
1,2-Dichloroethane-d4 (S)	%	99	70-130	01/08/21 00:46	
4-Bromofluorobenzene (S)	%	97	70-130	01/08/21 00:46	
Toluene-d8 (S)	%	97	70-130	01/08/21 00:46	

LABORATORY CONTROL SAMPLE: 3121998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.4	99	70-130	
1,1,1-Trichloroethane	ug/L	50	47.3	95	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	51.4	103	70-130	
1,1,2-Trichloroethane	ug/L	50	48.8	98	70-130	
1,1-Dichloroethane	ug/L	50	48.0	96	70-130	
1,1-Dichloroethene	ug/L	50	50.0	100	70-132	
1,1-Dichloropropene	ug/L	50	47.1	94	70-131	
1,2,3-Trichlorobenzene	ug/L	50	51.0	102	70-134	
1,2,3-Trichloropropane	ug/L	50	51.0	102	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.2	100	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	49.6	99	70-130	
1,2-Dichlorobenzene	ug/L	50	50.8	102	70-130	
1,2-Dichloroethane	ug/L	50	49.0	98	70-130	
1,2-Dichloropropane	ug/L	50	48.3	97	70-130	
1,3-Dichlorobenzene	ug/L	50	49.8	100	70-130	
1,3-Dichloropropane	ug/L	50	50.0	100	70-130	

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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.: 92515248

LABORATORY CONTROL SAMPLE: 3121998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	49.5	99	70-130	
2,2-Dichloropropane	ug/L	50	46.1	92	70-130	
2-Butanone (MEK)	ug/L	100	90.5	91	70-133	
2-Chlorotoluene	ug/L	50	49.9	100	70-130	
2-Hexanone	ug/L	100	93.0	93	70-130	
4-Chlorotoluene	ug/L	50	48.2	96	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.3	92	70-130	
Acetone	ug/L	100	92.9	93	70-144	
Benzene	ug/L	50	47.6	95	70-130	
Bromobenzene	ug/L	50	47.9	96	70-130	
Bromochloromethane	ug/L	50	47.5	95	70-130	
Bromodichloromethane	ug/L	50	44.5	89	70-130	
Bromoform	ug/L	50	51.8	104	70-131	
Bromomethane	ug/L	50	37.6	75	30-177	
Carbon tetrachloride	ug/L	50	47.8	96	70-130	
Chlorobenzene	ug/L	50	49.6	99	70-130	
Chloroethane	ug/L	50	28.0	56	46-131	IL
Chloroform	ug/L	50	46.9	94	70-130	
Chloromethane	ug/L	50	38.0	76	49-130	
cis-1,2-Dichloroethene	ug/L	50	48.1	96	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.9	100	70-130	
Dibromochloromethane	ug/L	50	48.8	98	70-130	
Dibromomethane	ug/L	50	50.5	101	70-130	
Dichlorodifluoromethane	ug/L	50	40.1	80	52-134	
Diisopropyl ether	ug/L	50	44.0	88	70-131	
Ethylbenzene	ug/L	50	48.0	96	70-130	
Hexachloro-1,3-butadiene	ug/L	50	49.0	98	70-131	
m&p-Xylene	ug/L	100	97.7	98	70-130	
Methyl-tert-butyl ether	ug/L	50	45.4	91	70-130	
Methylene Chloride	ug/L	50	46.3	93	68-130	
Naphthalene	ug/L	50	50.6	101	70-133	
o-Xylene	ug/L	50	48.8	98	70-130	
p-Isopropyltoluene	ug/L	50	47.9	96	70-130	
Styrene	ug/L	50	50.7	101	70-130	
Tetrachloroethene	ug/L	50	47.7	95	70-130	
Toluene	ug/L	50	47.4	95	70-130	
trans-1,2-Dichloroethene	ug/L	50	48.2	96	70-130	
trans-1,3-Dichloropropene	ug/L	50	48.9	98	70-130	
Trichloroethene	ug/L	50	49.2	98	70-130	
Trichlorofluoromethane	ug/L	50	41.1	82	61-130	
Vinyl acetate	ug/L	100	97.6	98	70-140	
Vinyl chloride	ug/L	50	41.4	83	59-142	
Xylene (Total)	ug/L	150	147	98	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			99	70-130	

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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.: 92515248

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3121999 3122000

Parameter	Units	92515069001 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	800	800	862	868	108	109	70-135	1	30	
1,1,1-Trichloroethane	ug/L	ND	800	800	890	877	111	110	70-148	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	800	800	860	833	107	104	70-131	3	30	
1,1,2-Trichloroethane	ug/L	76.6	800	800	928	906	106	104	70-136	2	30	
1,1-Dichloroethane	ug/L	ND	800	800	883	877	110	110	70-147	1	30	
1,1-Dichloroethene	ug/L	ND	800	800	923	903	115	113	70-158	2	30	
1,1-Dichloropropene	ug/L	ND	800	800	877	856	110	107	70-149	2	30	
1,2,3-Trichlorobenzene	ug/L	ND	800	800	908	881	113	110	68-140	3	30	
1,2,3-Trichloropropane	ug/L	ND	800	800	934	890	117	111	67-137	5	30	
1,2,4-Trichlorobenzene	ug/L	ND	800	800	911	886	114	111	70-139	3	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	800	800	1100	1020	112	103	69-136	7	30	
1,2-Dibromoethane (EDB)	ug/L	249	800	800	1120	1100	109	107	70-137	1	30	
1,2-Dichlorobenzene	ug/L	ND	800	800	906	880	113	110	70-133	3	30	
1,2-Dichloroethane	ug/L	ND	800	800	892	872	108	106	67-138	2	30	
1,2-Dichloropropane	ug/L	1130	800	800	2000	1990	109	108	70-138	0	30	
1,3-Dichlorobenzene	ug/L	ND	800	800	873	861	109	108	70-133	1	30	
1,3-Dichloropropane	ug/L	ND	800	800	891	854	111	107	70-136	4	30	
1,4-Dichlorobenzene	ug/L	ND	800	800	906	876	113	110	70-133	3	30	
2,2-Dichloropropane	ug/L	ND	800	800	878	838	110	105	52-155	5	30	
2-Butanone (MEK)	ug/L	ND	1600	1600	1740	1570	109	98	61-147	10	30	
2-Chlorotoluene	ug/L	ND	800	800	879	858	110	107	70-141	2	30	
2-Hexanone	ug/L	ND	1600	1600	1740	1590	109	100	67-139	9	30	
4-Chlorotoluene	ug/L	ND	800	800	854	835	107	104	70-135	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	1600	1600	1720	1600	107	100	67-136	7	30	
Acetone	ug/L	ND	1600	1600	1780	1640	111	102	55-159	8	30	
Benzene	ug/L	ND	800	800	885	876	109	107	67-150	1	30	
Bromobenzene	ug/L	ND	800	800	865	853	108	107	70-134	1	30	
Bromochloromethane	ug/L	ND	800	800	863	829	108	104	70-146	4	30	
Bromodichloromethane	ug/L	ND	800	800	818	805	98	97	70-138	2	30	
Bromoform	ug/L	ND	800	800	835	822	104	103	57-138	2	30	
Bromomethane	ug/L	ND	800	800	578	663	72	83	10-200	14	30	
Carbon tetrachloride	ug/L	112	800	800	1030	997	115	111	70-147	3	30	
Chlorobenzene	ug/L	ND	800	800	887	877	111	110	70-137	1	30	
Chloroethane	ug/L	ND	800	800	689	697	86	87	51-166	1	30	IL
Chloroform	ug/L	4920	800	800	5800	5550	110	79	70-144	4	30	
Chloromethane	ug/L	ND	800	800	683	667	85	83	24-161	2	30	
cis-1,2-Dichloroethene	ug/L	ND	800	800	878	862	110	108	67-148	2	30	
cis-1,3-Dichloropropene	ug/L	ND	800	800	881	880	110	110	70-142	0	30	
Dibromochloromethane	ug/L	ND	800	800	849	832	106	104	68-138	2	30	
Dibromomethane	ug/L	ND	800	800	890	883	111	110	70-134	1	30	
Dichlorodifluoromethane	ug/L	ND	800	800	717	682	90	85	43-155	5	30	
Diisopropyl ether	ug/L	ND	800	800	830	807	104	101	65-146	3	30	
Ethylbenzene	ug/L	ND	800	800	864	867	108	108	68-143	0	30	
Hexachloro-1,3-butadiene	ug/L	ND	800	800	873	876	109	110	62-151	0	30	

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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.: 92515248

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3121999 3122000

Parameter	Units	92515069001 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	1600	1600	1770	1740	111	109	53-157	1	30	
Methyl-tert-butyl ether	ug/L	ND	800	800	851	824	106	103	59-156	3	30	
Methylene Chloride	ug/L	325	800	800	1180	1150	107	103	64-148	3	30	
Naphthalene	ug/L	ND	800	800	924	890	116	111	57-150	4	30	
o-Xylene	ug/L	ND	800	800	861	854	108	107	68-143	1	30	
p-Isopropyltoluene	ug/L	ND	800	800	884	874	110	109	70-141	1	30	
Styrene	ug/L	ND	800	800	879	868	110	109	70-136	1	30	
Tetrachloroethene	ug/L	53.3	800	800	963	927	114	109	70-139	4	30	
Toluene	ug/L	ND	800	800	861	854	108	107	47-157	1	30	
trans-1,2-Dichloroethene	ug/L	ND	800	800	907	875	113	109	70-149	4	30	
trans-1,3-Dichloropropene	ug/L	ND	800	800	842	829	105	104	70-138	1	30	
Trichloroethene	ug/L	135	800	800	1030	1030	111	111	70-149	0	30	
Trichlorofluoromethane	ug/L	ND	800	800	837	832	105	104	61-154	1	30	
Vinyl acetate	ug/L	ND	1600	1600	1870	1780	117	111	48-156	5	30	
Vinyl chloride	ug/L	ND	800	800	727	709	91	89	55-172	3	30	
Xylene (Total)	ug/L	ND	2400	2400	2630	2600	110	108	66-145	1	30	
1,2-Dichloroethane-d4 (S)	%						100	99	70-130			
4-Bromofluorobenzene (S)	%						99	99	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.: 92515248

QC Batch: 591357
QC Batch Method: EPA 8260D Mod.
Analysis Method: EPA 8260D Mod.
Analysis Description: 8260D MSV SIM
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92515248001

METHOD BLANK: 3122052 Matrix: Water
Associated Lab Samples: 92515248001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	01/07/21 16:33	
1,2-Dichloroethane-d4 (S)	%	107	70-130	01/07/21 16:33	
Toluene-d8 (S)	%	106	66-133	01/07/21 16:33	

LABORATORY CONTROL SAMPLE: 3122053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	21.8	109	70-130	
1,2-Dichloroethane-d4 (S)	%			106	70-130	
Toluene-d8 (S)	%			107	66-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3122054 3122055

Parameter	Units	92515248001 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	13.2	20	20	37.4	36.8	121	118	64-141	2	30	
1,2-Dichloroethane-d4 (S)	%						101	103	70-130		30	
Toluene-d8 (S)	%						102	102	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.: 92515248

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

IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.

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.: 92515248

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92515248001	**MW-42**	EPA 8260D	591349		
92515248002	**Trip Blank**	EPA 8260D	591349		
92515248001	**MW-42**	EPA 8260D Mod.	591357		

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

Sample Condition Upon Receipt

Client Name: WSP USA

Project #: WO# : 92515248

92515248

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

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

Date/Initials Person Examining Contents: VS 1/7/2021

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: 1.1 **Correction Factor:** Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 1.0

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 bottles**

Project # **WO#: 92515248**

PM: BV Due Date: 01/14/21

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																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

Page 1 of 1

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

No. 10579

WSP

Project Name: Kop Flex	WSP USA Contact Name: Molly Long
Project Location: Maryland	WSP USA Contact E-mail: molly.long @wsp.com
Project Number & Task: 31401545.0103	WSP USA Contact Phone: 703 709 6500
Sampler(s) Name(s): Molly Long	Sampler(s) Signature(s):

Laboratory Name & Location: Pace, NC

Laboratory Project Manager: Bonnie V

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

Sample Identification	Matrix	Collection Start* Date	Collection Start* Time	Collection Stop* Date	Collection Stop* Time	Number of Containers	Requested Analyses & Preservatives: VOC (8260D)	8260 - 1,4-dioxane with SIMS	Sample Comments
MW-42	AQ	1/6/2021	11	45		6	X	X	92515248-001
Trip Blank		lab provided				2	X		002

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	1/6/21	1530				Fedex	8127 8179 4685
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
			VS PACE HK	1/7/2021	1052	1	08060

*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.: 92507929

Dear Eric Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on November 24, 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.: 92507929

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.: 92507929

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92507929001	**RW-1S**	Water	11/22/20 13:35	11/24/20 11:00
92507929002	**RW-2S**	Water	11/22/20 13:40	11/24/20 11:00
92507929003	**RW-3S**	Water	11/22/20 13:50	11/24/20 11:00
92507929004	**RW-1D**	Water	11/22/20 14:20	11/24/20 11:00
92507929005	**RW-2D**	Water	11/22/20 14:50	11/24/20 11:00
92507929006	**Trip Blank A**	Water	11/22/20 00:00	11/24/20 11:00

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Kop Flex
Pace Project No.: 92507929

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92507929001	**RW-1S**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507929002	**RW-2S**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507929003	**RW-3S**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	LMB	3	PASI-C
92507929004	**RW-1D**	EPA 8260D	SAS	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507929005	**RW-2D**	EPA 8260D	CL	63	PASI-C
		EPA 8260D Mod.	CL	3	PASI-C
92507929006	**Trip Blank A**	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
Pace Project No.: 92507929

Sample: RW-1S **Lab ID: 92507929001** Collected: 11/22/20 13:35 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	62.5	2.5		11/25/20 20:43	67-64-1	
Benzene	ND	ug/L	2.5	2.5		11/25/20 20:43	71-43-2	
Bromobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	108-86-1	
Bromochloromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	74-97-5	
Bromodichloromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	75-27-4	
Bromoform	ND	ug/L	2.5	2.5		11/25/20 20:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5		11/25/20 20:43	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	12.5	2.5		11/25/20 20:43	78-93-3	
Carbon tetrachloride	ND	ug/L	2.5	2.5		11/25/20 20:43	56-23-5	
Chlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	108-90-7	
Chloroethane	**12.8**	ug/L	2.5	2.5		11/25/20 20:43	75-00-3	
Chloroform	ND	ug/L	12.5	2.5		11/25/20 20:43	67-66-3	
Chloromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	74-87-3	v2
2-Chlorotoluene	ND	ug/L	2.5	2.5		11/25/20 20:43	95-49-8	L1
4-Chlorotoluene	ND	ug/L	2.5	2.5		11/25/20 20:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	12.5	2.5		11/25/20 20:43	96-12-8	
Dibromochloromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	124-48-1	L1
1,2-Dibromoethane (EDB)	ND	ug/L	2.5	2.5		11/25/20 20:43	106-93-4	
Dibromomethane	ND	ug/L	2.5	2.5		11/25/20 20:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	75-71-8	
1,1-Dichloroethane	**81.2**	ug/L	2.5	2.5		11/25/20 20:43	75-34-3	M1
1,2-Dichloroethane	ND	ug/L	2.5	2.5		11/25/20 20:43	107-06-2	
1,1-Dichloroethene	**344**	ug/L	2.5	2.5		11/25/20 20:43	75-35-4	M1,R1
cis-1,2-Dichloroethene	ND	ug/L	2.5	2.5		11/25/20 20:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.5	2.5		11/25/20 20:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.5	2.5		11/25/20 20:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.5	2.5		11/25/20 20:43	142-28-9	L1
2,2-Dichloropropane	ND	ug/L	2.5	2.5		11/25/20 20:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.5	2.5		11/25/20 20:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.5	2.5		11/25/20 20:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.5	2.5		11/25/20 20:43	10061-02-6	
Diisopropyl ether	ND	ug/L	2.5	2.5		11/25/20 20:43	108-20-3	
Ethylbenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.5	2.5		11/25/20 20:43	87-68-3	
2-Hexanone	ND	ug/L	12.5	2.5		11/25/20 20:43	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.5	2.5		11/25/20 20:43	99-87-6	
Methylene Chloride	ND	ug/L	12.5	2.5		11/25/20 20:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	12.5	2.5		11/25/20 20:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.5	2.5		11/25/20 20:43	1634-04-4	
Naphthalene	ND	ug/L	2.5	2.5		11/25/20 20:43	91-20-3	
Styrene	ND	ug/L	2.5	2.5		11/25/20 20:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.5	2.5		11/25/20 20:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.5	2.5		11/25/20 20:43	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.: 92507929

Sample: RW-1S **Lab ID: 92507929001** Collected: 11/22/20 13:35 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	2.5	2.5		11/25/20 20:43	127-18-4	
Toluene	ND	ug/L	2.5	2.5		11/25/20 20:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.5	2.5		11/25/20 20:43	120-82-1	
1,1,1-Trichloroethane	**65.4**	ug/L	2.5	2.5		11/25/20 20:43	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/L	2.5	2.5		11/25/20 20:43	79-00-5	
Trichloroethene	ND	ug/L	2.5	2.5		11/25/20 20:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.5	2.5		11/25/20 20:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	2.5		11/25/20 20:43	96-18-4	
Vinyl acetate	ND	ug/L	5.0	2.5		11/25/20 20:43	108-05-4	
Vinyl chloride	**3.4**	ug/L	2.5	2.5		11/25/20 20:43	75-01-4	
Xylene (Total)	ND	ug/L	2.5	2.5		11/25/20 20:43	1330-20-7	
m&p-Xylene	ND	ug/L	5.0	2.5		11/25/20 20:43	179601-23-1	
o-Xylene	ND	ug/L	2.5	2.5		11/25/20 20:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	2.5		11/25/20 20:43	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	2.5		11/25/20 20:43	17060-07-0	
Toluene-d8 (S)	104	%	70-130	2.5		11/25/20 20:43	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**351**	ug/L	10.0	5		11/25/20 07:11	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	5		11/25/20 07:11	17060-07-0	
Toluene-d8 (S)	91	%	66-133	5		11/25/20 07:11	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.: 92507929

Sample: RW-2S **Lab ID: 92507929002** Collected: 11/22/20 13:40 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 05:34	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 05:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 05:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 05:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 05:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 05:34	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 05:34	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 05:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 05:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 05:34	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 05:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 05:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 05:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 05:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 05:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 05:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 05:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 05:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 05:34	75-71-8	
1,1-Dichloroethane	**18.6**	ug/L	1.0	1		11/26/20 05:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 05:34	107-06-2	
1,1-Dichloroethene	**129**	ug/L	1.0	1		11/26/20 05:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 05:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 05:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 05:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 05:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 05:34	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 05:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 05:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 05:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 05:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 05:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 05:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 05:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 05:34	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 05:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 05:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 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
Pace Project No.: 92507929

Sample: RW-2S **Lab ID: 92507929002** Collected: 11/22/20 13:40 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 05:34	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 05:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 05:34	120-82-1	
1,1,1-Trichloroethane	**191**	ug/L	1.0	1		11/26/20 05:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 05:34	79-00-5	
Trichloroethene	**1.4**	ug/L	1.0	1		11/26/20 05:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 05:34	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 05:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 05:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 05:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 05:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 05:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 05:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/26/20 05:34	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	70-130	1		11/26/20 05:34	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		11/26/20 05:34	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**97.0**	ug/L	2.0	1		11/25/20 22:29	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/25/20 22:29	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 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
Pace Project No.: 92507929

Sample: RW-3S **Lab ID: 92507929003** Collected: 11/22/20 13:50 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 18:23	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 18:23	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 18:23	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 18:23	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 18:23	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 18:23	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 18:23	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 18:23	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 18:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 18:23	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 18:23	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 18:23	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:23	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 18:23	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 18:23	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 18:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 18:23	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 18:23	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 18:23	75-71-8	
1,1-Dichloroethane	**2.8**	ug/L	1.0	1		11/25/20 18:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 18:23	107-06-2	
1,1-Dichloroethene	**4.2**	ug/L	1.0	1		11/25/20 18:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 18:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:23	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:23	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 18:23	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:23	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 18:23	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 18:23	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 18:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 18:23	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 18:23	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 18:23	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 18:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 18:23	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 18:23	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 18:23	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 18:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 18:23	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.: 92507929

Sample: RW-3S **Lab ID: 92507929003** Collected: 11/22/20 13:50 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 18:23	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 18:23	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 18:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 18:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 18:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 18:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 18:23	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 18:23	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 18:23	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 18:23	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 18:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 18:23	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/25/20 18:23	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		11/25/20 18:23	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/25/20 18:23	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**13.8**	ug/L	2.0	1		11/25/20 00:24	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/25/20 00:24	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/25/20 00:24	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.: 92507929

Sample: RW-1D **Lab ID: 92507929004** Collected: 11/22/20 14:20 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	50.0	2		12/02/20 22:50	67-64-1	
Benzene	ND	ug/L	2.0	2		12/02/20 22:50	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/02/20 22:50	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/02/20 22:50	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/02/20 22:50	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/02/20 22:50	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/02/20 22:50	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	10.0	2		12/02/20 22:50	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/02/20 22:50	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	108-90-7	
Chloroethane	**4.0**	ug/L	2.0	2		12/02/20 22:50	75-00-3	v3
Chloroform	ND	ug/L	10.0	2		12/02/20 22:50	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/02/20 22:50	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/02/20 22:50	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/02/20 22:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	2		12/02/20 22:50	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/02/20 22:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/02/20 22:50	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/02/20 22:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/02/20 22:50	75-71-8	
1,1-Dichloroethane	**42.0**	ug/L	2.0	2		12/02/20 22:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	2.0	2		12/02/20 22:50	107-06-2	
1,1-Dichloroethene	**179**	ug/L	2.0	2		12/02/20 22:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/02/20 22:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/02/20 22:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/02/20 22:50	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/02/20 22:50	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/02/20 22:50	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/02/20 22:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/02/20 22:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/02/20 22:50	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/02/20 22:50	108-20-3	
Ethylbenzene	ND	ug/L	2.0	2		12/02/20 22:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/02/20 22:50	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/02/20 22:50	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/02/20 22:50	99-87-6	
Methylene Chloride	ND	ug/L	10.0	2		12/02/20 22:50	75-09-2	v2
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/02/20 22:50	108-10-1	v2
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/02/20 22:50	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/02/20 22:50	91-20-3	
Styrene	ND	ug/L	2.0	2		12/02/20 22:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/02/20 22:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/02/20 22:50	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.: 92507929

Sample: RW-1D **Lab ID: 92507929004** Collected: 11/22/20 14:20 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	2.0	2		12/02/20 22:50	127-18-4	
Toluene	ND	ug/L	2.0	2		12/02/20 22:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/02/20 22:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	2.0	2		12/02/20 22:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/02/20 22:50	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/02/20 22:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/02/20 22:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/02/20 22:50	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/02/20 22:50	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/02/20 22:50	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/02/20 22:50	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/02/20 22:50	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/02/20 22:50	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	2		12/02/20 22:50	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	2		12/02/20 22:50	17060-07-0	
Toluene-d8 (S)	101	%	70-130	2		12/02/20 22:50	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**90.9**	ug/L	2.0	1		11/25/20 20:52	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		11/25/20 20:52	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 20:52	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
Pace Project No.: 92507929

Sample: RW-2D **Lab ID: 92507929005** Collected: 11/22/20 14:50 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		11/26/20 04:39	67-64-1	
Benzene	ND	ug/L	1.0	1		11/26/20 04:39	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/26/20 04:39	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/26/20 04:39	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/26/20 04:39	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/26/20 04:39	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/26/20 04:39	74-83-9	v2
2-Butanone (MEK)	ND	ug/L	5.0	1		11/26/20 04:39	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/26/20 04:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/26/20 04:39	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/26/20 04:39	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/26/20 04:39	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:39	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/26/20 04:39	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/26/20 04:39	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/26/20 04:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/26/20 04:39	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/26/20 04:39	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/26/20 04:39	75-71-8	
1,1-Dichloroethane	**17.9**	ug/L	1.0	1		11/26/20 04:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/26/20 04:39	107-06-2	
1,1-Dichloroethene	**131**	ug/L	1.0	1		11/26/20 04:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/26/20 04:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:39	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:39	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/26/20 04:39	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:39	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/26/20 04:39	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/26/20 04:39	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/26/20 04:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/26/20 04:39	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/26/20 04:39	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/26/20 04:39	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/26/20 04:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/26/20 04:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/26/20 04:39	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/26/20 04:39	91-20-3	
Styrene	ND	ug/L	1.0	1		11/26/20 04:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/26/20 04:39	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.: 92507929

Sample: RW-2D **Lab ID: 92507929005** Collected: 11/22/20 14:50 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		11/26/20 04:39	127-18-4	
Toluene	ND	ug/L	1.0	1		11/26/20 04:39	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/26/20 04:39	120-82-1	
1,1,1-Trichloroethane	**5.5**	ug/L	1.0	1		11/26/20 04:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/26/20 04:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/26/20 04:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/26/20 04:39	75-69-4	v1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/26/20 04:39	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/26/20 04:39	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/26/20 04:39	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/26/20 04:39	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/26/20 04:39	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/26/20 04:39	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/26/20 04:39	460-00-4	
1,2-Dichloroethane-d4 (S)	119	%	70-130	1		11/26/20 04:39	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/26/20 04:39	2037-26-5	
8260D MSV SIM	Analytical Method: EPA 8260D Mod. Pace Analytical Services - Charlotte							
1,4-Dioxane (p-Dioxane)	**74.5**	ug/L	2.0	1		11/25/20 21:11	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		11/25/20 21:11	17060-07-0	
Toluene-d8 (S)	94	%	66-133	1		11/25/20 21:11	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.: 92507929

Sample: Trip Blank A **Lab ID: 92507929006** Collected: 11/22/20 00:00 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 12:45	67-64-1	
Benzene	ND	ug/L	1.0	1		11/25/20 12:45	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/25/20 12:45	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/25/20 12:45	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/25/20 12:45	75-27-4	
Bromoform	ND	ug/L	1.0	1		11/25/20 12:45	75-25-2	
Bromomethane	ND	ug/L	2.0	1		11/25/20 12:45	74-83-9	IK
2-Butanone (MEK)	ND	ug/L	5.0	1		11/25/20 12:45	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		11/25/20 12:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/25/20 12:45	75-00-3	
Chloroform	ND	ug/L	5.0	1		11/25/20 12:45	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/25/20 12:45	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 12:45	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/25/20 12:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		11/25/20 12:45	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/25/20 12:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/25/20 12:45	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/25/20 12:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/25/20 12:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/25/20 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/25/20 12:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/25/20 12:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 12:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/25/20 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 12:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/25/20 12:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/25/20 12:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/25/20 12:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		11/25/20 12:45	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		11/25/20 12:45	108-20-3	
Ethylbenzene	ND	ug/L	1.0	1		11/25/20 12:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/25/20 12:45	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		11/25/20 12:45	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/25/20 12:45	99-87-6	
Methylene Chloride	ND	ug/L	5.0	1		11/25/20 12:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		11/25/20 12:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		11/25/20 12:45	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		11/25/20 12:45	91-20-3	
Styrene	ND	ug/L	1.0	1		11/25/20 12:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 12:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/25/20 12:45	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.: 92507929

Sample: Trip Blank A **Lab ID: 92507929006** Collected: 11/22/20 00:00 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 12:45	127-18-4	
Toluene	ND	ug/L	1.0	1		11/25/20 12:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/25/20 12:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/25/20 12:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/25/20 12:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/25/20 12:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/25/20 12:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/25/20 12:45	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		11/25/20 12:45	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		11/25/20 12:45	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		11/25/20 12:45	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		11/25/20 12:45	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/25/20 12:45	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		11/25/20 12:45	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		11/25/20 12:45	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		11/25/20 12:45	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 16:39	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		11/24/20 16:39	17060-07-0	
Toluene-d8 (S)	92	%	66-133	1		11/24/20 16:39	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.: 92507929

QC Batch: 582948
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507929003, 92507929006

METHOD BLANK: 3082529
Matrix: Water
Associated Lab Samples: 92507929003, 92507929006

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	

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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.: 92507929

METHOD BLANK: 3082529 Matrix: Water
Associated Lab Samples: 92507929003, 92507929006

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	

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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.: 92507929

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	

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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.: 92507929

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	

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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.: 92507929

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			

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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.: 92507929

QC Batch: 582949
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92507929001

METHOD BLANK: 3082534 Matrix: Water
Associated Lab Samples: 92507929001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,1,1-Trichloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,1-Dichloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,1-Dichloroethene	ug/L	ND	1.0	11/25/20 12:48	
1,1-Dichloropropene	ug/L	ND	1.0	11/25/20 12:48	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/25/20 12:48	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	11/25/20 12:48	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	11/25/20 12:48	
1,2-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
1,2-Dichloroethane	ug/L	ND	1.0	11/25/20 12:48	
1,2-Dichloropropane	ug/L	ND	1.0	11/25/20 12:48	
1,3-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
1,3-Dichloropropane	ug/L	ND	1.0	11/25/20 12:48	
1,4-Dichlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
2,2-Dichloropropane	ug/L	ND	1.0	11/25/20 12:48	
2-Butanone (MEK)	ug/L	ND	5.0	11/25/20 12:48	
2-Chlorotoluene	ug/L	ND	1.0	11/25/20 12:48	
2-Hexanone	ug/L	ND	5.0	11/25/20 12:48	
4-Chlorotoluene	ug/L	ND	1.0	11/25/20 12:48	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	11/25/20 12:48	
Acetone	ug/L	ND	25.0	11/25/20 12:48	
Benzene	ug/L	ND	1.0	11/25/20 12:48	
Bromobenzene	ug/L	ND	1.0	11/25/20 12:48	
Bromochloromethane	ug/L	ND	1.0	11/25/20 12:48	
Bromodichloromethane	ug/L	ND	1.0	11/25/20 12:48	
Bromoform	ug/L	ND	1.0	11/25/20 12:48	
Bromomethane	ug/L	ND	2.0	11/25/20 12:48	v2
Carbon tetrachloride	ug/L	ND	1.0	11/25/20 12:48	
Chlorobenzene	ug/L	ND	1.0	11/25/20 12:48	
Chloroethane	ug/L	ND	1.0	11/25/20 12:48	
Chloroform	ug/L	ND	5.0	11/25/20 12:48	
Chloromethane	ug/L	ND	1.0	11/25/20 12:48	v2
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/25/20 12:48	
cis-1,3-Dichloropropene	ug/L	ND	1.0	11/25/20 12:48	
Dibromochloromethane	ug/L	ND	1.0	11/25/20 12:48	
Dibromomethane	ug/L	ND	1.0	11/25/20 12:48	

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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.: 92507929

METHOD BLANK: 3082534 Matrix: Water
Associated Lab Samples: 92507929001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	11/25/20 12:48	
Diisopropyl ether	ug/L	ND	1.0	11/25/20 12:48	
Ethylbenzene	ug/L	ND	1.0	11/25/20 12:48	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	11/25/20 12:48	
m&p-Xylene	ug/L	ND	2.0	11/25/20 12:48	
Methyl-tert-butyl ether	ug/L	ND	1.0	11/25/20 12:48	
Methylene Chloride	ug/L	ND	5.0	11/25/20 12:48	
Naphthalene	ug/L	ND	1.0	11/25/20 12:48	
o-Xylene	ug/L	ND	1.0	11/25/20 12:48	
p-Isopropyltoluene	ug/L	ND	1.0	11/25/20 12:48	
Styrene	ug/L	ND	1.0	11/25/20 12:48	
Tetrachloroethene	ug/L	ND	1.0	11/25/20 12:48	
Toluene	ug/L	ND	1.0	11/25/20 12:48	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/25/20 12:48	
trans-1,3-Dichloropropene	ug/L	ND	1.0	11/25/20 12:48	
Trichloroethene	ug/L	ND	1.0	11/25/20 12:48	
Trichlorofluoromethane	ug/L	ND	1.0	11/25/20 12:48	
Vinyl acetate	ug/L	ND	2.0	11/25/20 12:48	
Vinyl chloride	ug/L	ND	1.0	11/25/20 12:48	
Xylene (Total)	ug/L	ND	1.0	11/25/20 12:48	
1,2-Dichloroethane-d4 (S)	%	97	70-130	11/25/20 12:48	
4-Bromofluorobenzene (S)	%	98	70-130	11/25/20 12:48	
Toluene-d8 (S)	%	101	70-130	11/25/20 12:48	

LABORATORY CONTROL SAMPLE: 3082535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	63.8	128	70-130	
1,1,1-Trichloroethane	ug/L	50	46.9	94	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	63.3	127	70-130	
1,1,2-Trichloroethane	ug/L	50	51.2	102	70-130	
1,1-Dichloroethane	ug/L	50	46.3	93	70-130	
1,1-Dichloroethene	ug/L	50	47.2	94	70-132	
1,1-Dichloropropene	ug/L	50	49.6	99	70-131	
1,2,3-Trichlorobenzene	ug/L	50	63.6	127	70-134	
1,2,3-Trichloropropane	ug/L	50	61.7	123	70-130	
1,2,4-Trichlorobenzene	ug/L	50	64.2	128	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	65.0	130	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	64.6	129	70-130	
1,2-Dichlorobenzene	ug/L	50	63.9	128	70-130	
1,2-Dichloroethane	ug/L	50	45.3	91	70-130	
1,2-Dichloropropane	ug/L	50	51.7	103	70-130	
1,3-Dichlorobenzene	ug/L	50	64.4	129	70-130	
1,3-Dichloropropane	ug/L	50	65.6	131	70-130	L1

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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.: 92507929

LABORATORY CONTROL SAMPLE: 3082535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	64.3	129	70-130	
2,2-Dichloropropane	ug/L	50	47.4	95	70-130	
2-Butanone (MEK)	ug/L	100	93.7	94	70-133	
2-Chlorotoluene	ug/L	50	71.5	143	70-130	L1
2-Hexanone	ug/L	100	119	119	70-130	
4-Chlorotoluene	ug/L	50	64.3	129	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.3	95	70-130	
Acetone	ug/L	100	97.0	97	70-144	
Benzene	ug/L	50	50.0	100	70-130	
Bromobenzene	ug/L	50	64.7	129	70-130	
Bromochloromethane	ug/L	50	46.2	92	70-130	
Bromodichloromethane	ug/L	50	47.7	95	70-130	
Bromoform	ug/L	50	61.5	123	70-131	
Bromomethane	ug/L	50	43.1	86	30-177	v3
Carbon tetrachloride	ug/L	50	48.4	97	70-130	
Chlorobenzene	ug/L	50	60.7	121	70-130	
Chloroethane	ug/L	50	41.4	83	46-131	
Chloroform	ug/L	50	47.1	94	70-130	
Chloromethane	ug/L	50	43.2	86	49-130	v3
cis-1,2-Dichloroethene	ug/L	50	45.2	90	70-130	
cis-1,3-Dichloropropene	ug/L	50	54.8	110	70-130	
Dibromochloromethane	ug/L	50	66.3	133	70-130	L1
Dibromomethane	ug/L	50	48.7	97	70-130	
Dichlorodifluoromethane	ug/L	50	42.7	85	52-134	
Diisopropyl ether	ug/L	50	47.7	95	70-131	
Ethylbenzene	ug/L	50	58.9	118	70-130	
Hexachloro-1,3-butadiene	ug/L	50	62.2	124	70-131	
m&p-Xylene	ug/L	100	120	120	70-130	
Methyl-tert-butyl ether	ug/L	50	48.1	96	70-130	
Methylene Chloride	ug/L	50	44.0	88	68-130	
Naphthalene	ug/L	50	64.1	128	70-133	
o-Xylene	ug/L	50	61.1	122	70-130	
p-Isopropyltoluene	ug/L	50	64.3	129	70-130	
Styrene	ug/L	50	61.8	124	70-130	
Tetrachloroethene	ug/L	50	59.6	119	70-130	
Toluene	ug/L	50	47.7	95	70-130	
trans-1,2-Dichloroethene	ug/L	50	46.2	92	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.5	107	70-130	
Trichloroethene	ug/L	50	51.2	102	70-130	
Trichlorofluoromethane	ug/L	50	46.2	92	61-130	
Vinyl acetate	ug/L	100	119	119	70-140	
Vinyl chloride	ug/L	50	42.7	85	59-142	
Xylene (Total)	ug/L	150	181	121	70-130	
1,2-Dichloroethane-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			93	70-130	

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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.: 92507929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3082536 3082537

Parameter	Units	92507929001 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	50	50	54.5	52.9	109	106	70-135	3	30	
1,1,1-Trichloroethane	ug/L	65.4	50	50	115	142	100	152	70-148	20	30	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	53.1	49.7	106	99	70-131	7	30	
1,1,2-Trichloroethane	ug/L	ND	50	50	43.8	51.8	88	104	70-136	17	30	
1,1-Dichloroethane	ug/L	81.2	50	50	138	156	114	150	70-147	12	30	M1
1,1-Dichloroethene	ug/L	344	50	50	263	419	-162	150	70-158	46	30	M1,R1
1,1-Dichloropropene	ug/L	ND	50	50	61.4	63.8	123	128	70-149	4	30	
1,2,3-Trichlorobenzene	ug/L	ND	50	50	47.9	42.8	96	86	68-140	11	30	
1,2,3-Trichloropropane	ug/L	ND	50	50	50.7	49.2	101	98	67-137	3	30	
1,2,4-Trichlorobenzene	ug/L	ND	50	50	48.3	44.2	97	88	70-139	9	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	52.8	51.7	106	103	69-136	2	30	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	51.5	52.2	103	104	70-137	1	30	
1,2-Dichlorobenzene	ug/L	ND	50	50	50.9	50.5	102	101	70-133	1	30	
1,2-Dichloroethane	ug/L	ND	50	50	54.4	55.6	105	108	67-138	2	30	
1,2-Dichloropropane	ug/L	ND	50	50	48.0	56.4	96	113	70-138	16	30	
1,3-Dichlorobenzene	ug/L	ND	50	50	52.5	50.8	105	102	70-133	3	30	
1,3-Dichloropropane	ug/L	ND	50	50	51.0	52.6	102	105	70-136	3	30	
1,4-Dichlorobenzene	ug/L	ND	50	50	52.4	51.2	105	102	70-133	2	30	
2,2-Dichloropropane	ug/L	ND	50	50	57.9	60.0	116	120	52-155	3	30	
2-Butanone (MEK)	ug/L	ND	100	100	110	112	110	112	61-147	2	30	
2-Chlorotoluene	ug/L	ND	50	50	53.9	53.9	108	108	70-141	0	30	
2-Hexanone	ug/L	ND	100	100	98.3	99.5	98	100	67-139	1	30	
4-Chlorotoluene	ug/L	ND	50	50	58.3	52.6	117	105	70-135	10	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	81.6	96.8	82	97	67-136	17	30	
Acetone	ug/L	ND	100	100	118	112	118	112	55-159	5	30	
Benzene	ug/L	ND	50	50	55.2	53.6	108	105	67-150	3	30	
Bromobenzene	ug/L	ND	50	50	59.6	53.1	119	106	70-134	12	30	
Bromochloromethane	ug/L	ND	50	50	58.9	59.5	118	119	70-146	1	30	
Bromodichloromethane	ug/L	ND	50	50	44.8	51.5	90	103	70-138	14	30	
Bromoform	ug/L	ND	50	50	59.4	49.1	119	98	57-138	19	30	
Bromomethane	ug/L	ND	50	50	71.5	69.5	143	139	10-200	3	30	
Carbon tetrachloride	ug/L	ND	50	50	56.2	56.3	112	113	70-147	0	30	
Chlorobenzene	ug/L	ND	50	50	51.5	53.2	103	106	70-137	3	30	
Chloroethane	ug/L	12.8	50	50	69.0	74.0	112	122	51-166	7	30	
Chloroform	ug/L	ND	50	50	57.8	58.2	116	116	70-144	1	30	
Chloromethane	ug/L	ND	50	50	54.5	57.1	109	114	24-161	5	30	
cis-1,2-Dichloroethene	ug/L	ND	50	50	58.2	60.9	113	118	67-148	5	30	
cis-1,3-Dichloropropene	ug/L	ND	50	50	45.3	53.9	91	108	70-142	17	30	
Dibromochloromethane	ug/L	ND	50	50	56.6	54.9	113	110	68-138	3	30	
Dibromomethane	ug/L	ND	50	50	48.6	51.7	97	103	70-134	6	30	
Dichlorodifluoromethane	ug/L	ND	50	50	51.8	51.7	104	103	43-155	0	30	
Diisopropyl ether	ug/L	ND	50	50	55.1	56.7	110	113	65-146	3	30	
Ethylbenzene	ug/L	ND	50	50	56.0	53.3	112	107	68-143	5	30	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	54.9	50.4	110	101	62-151	8	30	

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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.: 92507929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3082536 3082537

Parameter	Units	92507929001 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	100	100	109	105	109	105	53-157	4	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	56.8	57.5	114	115	59-156	1	30	
Methylene Chloride	ug/L	ND	50	50	58.9	59.4	118	119	64-148	1	30	
Naphthalene	ug/L	ND	50	50	47.7	41.4	95	83	57-150	14	30	
o-Xylene	ug/L	ND	50	50	52.3	53.2	105	106	68-143	2	30	
p-Isopropyltoluene	ug/L	ND	50	50	53.5	54.8	107	110	70-141	2	30	
Styrene	ug/L	ND	50	50	58.6	51.8	117	104	70-136	12	30	
Tetrachloroethene	ug/L	ND	50	50	52.7	51.4	105	103	70-139	2	30	
Toluene	ug/L	ND	50	50	45.6	53.1	87	102	47-157	15	30	
trans-1,2-Dichloroethene	ug/L	ND	50	50	63.0	61.4	126	123	70-149	3	30	
trans-1,3-Dichloropropene	ug/L	ND	50	50	43.4	50.3	87	101	70-138	15	30	
Trichloroethene	ug/L	ND	50	50	57.2	57.7	111	112	70-149	1	30	
Trichlorofluoromethane	ug/L	ND	50	50	59.6	60.6	119	121	61-154	2	30	
Vinyl acetate	ug/L	ND	100	100	127	129	127	129	48-156	2	30	
Vinyl chloride	ug/L	3.4	50	50	62.6	63.3	118	120	55-172	1	30	
Xylene (Total)	ug/L	ND	150	150	162	158	108	106	66-145	2	30	
1,2-Dichloroethane-d4 (S)	%						103	104	70-130			
4-Bromofluorobenzene (S)	%						103	96	70-130			
Toluene-d8 (S)	%						84	98	70-130			

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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.: 92507929

QC Batch: 583045
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92507929002, 92507929005

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507929002, 92507929005

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	
Dibromomethane	ug/L	ND	1.0	11/26/20 00:23	

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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.: 92507929

METHOD BLANK: 3083148 Matrix: Water
Associated Lab Samples: 92507929002, 92507929005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
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	
1,3-Dichlorobenzene	ug/L	50	50.5	101	70-130	
1,3-Dichloropropane	ug/L	50	51.7	103	70-130	

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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.: 92507929

LABORATORY CONTROL SAMPLE: 3083149

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

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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.: 92507929

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		20	20	19.7	20.9	98	105	70-135	6	30	
1,1,1-Trichloroethane	ug/L		20	20	22.5	22.6	113	113	70-148	0	30	
1,1,2,2-Tetrachloroethane	ug/L		20	20	15.7	27.0	78	135	70-131	53	30	M1,R1
1,1,2-Trichloroethane	ug/L		20	20	26.7	21.5	134	107	70-136	22	30	
1,1-Dichloroethane	ug/L		20	20	21.3	21.4	107	107	70-147	1	30	
1,1-Dichloroethene	ug/L		20	20	21.0	21.3	105	107	70-158	1	30	
1,1-Dichloropropene	ug/L		20	20	21.3	21.7	107	109	70-149	2	30	
1,2,3-Trichlorobenzene	ug/L		20	20	18.1	17.7	90	89	68-140	2	30	
1,2,3-Trichloropropane	ug/L		20	20	15.7	26.3	78	132	67-137	51	30	R1
1,2,4-Trichlorobenzene	ug/L		20	20	17.9	17.5	89	88	70-139	2	30	
1,2-Dibromo-3-chloropropane	ug/L		20	20	22.4	21.1	112	105	69-136	6	30	
1,2-Dibromoethane (EDB)	ug/L		20	20	21.1	21.8	106	109	70-137	3	30	
1,2-Dichlorobenzene	ug/L		20	20	20.0	19.2	100	96	70-133	4	30	
1,2-Dichloroethane	ug/L		20	20	20.3	21.2	102	106	67-138	4	30	
1,2-Dichloropropane	ug/L		20	20	26.4	20.9	132	105	70-138	23	30	
1,3-Dichlorobenzene	ug/L		20	20	19.5	21.4	97	107	70-133	9	30	
1,3-Dichloropropane	ug/L		20	20	21.4	21.7	107	109	70-136	1	30	
1,4-Dichlorobenzene	ug/L		20	20	19.8	21.2	99	106	70-133	7	30	
2,2-Dichloropropane	ug/L		20	20	14.6	15.1	73	75	52-155	3	30	
2-Butanone (MEK)	ug/L		40	40	44.6	44.3	111	111	61-147	1	30	
2-Chlorotoluene	ug/L		20	20	20.7	26.5	104	132	70-141	24	30	
2-Hexanone	ug/L		40	40	40.7	40.6	102	101	67-139	0	30	
4-Chlorotoluene	ug/L		20	20	19.6	23.8	98	119	70-135	19	30	
4-Methyl-2-pentanone (MIBK)	ug/L		40	40	51.2	41.4	128	103	67-136	21	30	
Acetone	ug/L		40	40	46.4	46.0	116	115	55-159	1	30	
Benzene	ug/L		20	20	20.9	22.4	105	112	67-150	7	30	
Bromobenzene	ug/L		20	20	21.8	25.6	109	128	70-134	16	30	
Bromochloromethane	ug/L		20	20	22.4	22.4	112	112	70-146	0	30	
Bromodichloromethane	ug/L		20	20	23.7	20.3	118	102	70-138	15	30	
Bromoform	ug/L		20	20	18.5	19.6	92	98	57-138	6	30	
Bromomethane	ug/L		20	20	23.7	23.8	119	119	10-200	0	30	
Carbon tetrachloride	ug/L		20	20	21.8	24.2	109	121	70-147	11	30	
Chlorobenzene	ug/L		20	20	21.1	21.3	106	107	70-137	1	30	
Chloroethane	ug/L		20	20	20.0	21.0	100	105	51-166	5	30	IK,v3
Chloroform	ug/L		20	20	22.4	23.2	112	116	70-144	3	30	
Chloromethane	ug/L		20	20	19.4	19.8	97	99	24-161	2	30	
cis-1,2-Dichloroethene	ug/L		20	20	21.2	22.2	106	111	67-148	5	30	
cis-1,3-Dichloropropene	ug/L		20	20	23.7	20.1	119	100	70-142	17	30	
Dibromochloromethane	ug/L		20	20	21.5	22.8	107	114	68-138	6	30	
Dibromomethane	ug/L		20	20	23.7	20.0	118	100	70-134	17	30	
Dichlorodifluoromethane	ug/L		20	20	14.7	15.2	74	76	43-155	3	30	
Diisopropyl ether	ug/L		20	20	19.8	19.9	99	100	65-146	1	30	
Ethylbenzene	ug/L		20	20	20.0	20.7	100	103	68-143	3	30	
Hexachloro-1,3-butadiene	ug/L		20	20	17.2	16.3	86	81	62-151	6	30	

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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.: 92507929

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
m&p-Xylene	ug/L		40	40	40.4	42.0	101	105	53-157	4	30	
Methyl-tert-butyl ether	ug/L		20	20	19.6	19.8	98	99	59-156	1	30	
Methylene Chloride	ug/L		20	20	20.6	20.3	103	102	64-148	1	30	
Naphthalene	ug/L		20	20	20.2	19.7	101	98	57-150	2	30	
o-Xylene	ug/L		20	20	21.5	22.0	107	110	68-143	2	30	
p-Isopropyltoluene	ug/L		20	20	19.2	21.5	96	107	70-141	11	30	
Styrene	ug/L		20	20	20.8	21.4	104	107	70-136	3	30	
Tetrachloroethene	ug/L		20	20	19.0	19.7	95	98	70-139	4	30	
Toluene	ug/L		20	20	26.5	21.8	132	109	47-157	19	30	
trans-1,2-Dichloroethene	ug/L		20	20	19.8	20.5	99	102	70-149	3	30	
trans-1,3-Dichloropropene	ug/L		20	20	24.5	21.0	123	105	70-138	15	30	
Trichloroethene	ug/L		20	20	20.8	22.2	104	111	70-149	7	30	
Trichlorofluoromethane	ug/L		20	20	20.3	20.3	101	102	61-154	0	30	
Vinyl acetate	ug/L		40	40	28.1	27.6	70	69	48-156	2	30	
Vinyl chloride	ug/L		20	20	19.4	19.4	97	97	55-172	0	30	
Xylene (Total)	ug/L		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			

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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.: 92507929

QC Batch: 583926
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260D MSV Low Level
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92507929004

METHOD BLANK: 3086935 Matrix: Water
Associated Lab Samples: 92507929004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
1,1-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	12/02/20 21:57	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloroethane	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
1,3-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
2,2-Dichloropropane	ug/L	ND	1.0	12/02/20 21:57	
2-Butanone (MEK)	ug/L	ND	5.0	12/02/20 21:57	
2-Chlorotoluene	ug/L	ND	1.0	12/02/20 21:57	
2-Hexanone	ug/L	ND	5.0	12/02/20 21:57	
4-Chlorotoluene	ug/L	ND	1.0	12/02/20 21:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/02/20 21:57	v2
Acetone	ug/L	ND	25.0	12/02/20 21:57	
Benzene	ug/L	ND	1.0	12/02/20 21:57	
Bromobenzene	ug/L	ND	1.0	12/02/20 21:57	
Bromochloromethane	ug/L	ND	1.0	12/02/20 21:57	
Bromodichloromethane	ug/L	ND	1.0	12/02/20 21:57	
Bromoform	ug/L	ND	1.0	12/02/20 21:57	
Bromomethane	ug/L	ND	2.0	12/02/20 21:57	v2
Carbon tetrachloride	ug/L	ND	1.0	12/02/20 21:57	
Chlorobenzene	ug/L	ND	1.0	12/02/20 21:57	
Chloroethane	ug/L	ND	1.0	12/02/20 21:57	v2
Chloroform	ug/L	ND	5.0	12/02/20 21:57	
Chloromethane	ug/L	ND	1.0	12/02/20 21:57	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
Dibromochloromethane	ug/L	ND	1.0	12/02/20 21:57	
Dibromomethane	ug/L	ND	1.0	12/02/20 21:57	

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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.: 92507929

METHOD BLANK: 3086935 Matrix: Water
Associated Lab Samples: 92507929004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/02/20 21:57	
Diisopropyl ether	ug/L	ND	1.0	12/02/20 21:57	
Ethylbenzene	ug/L	ND	1.0	12/02/20 21:57	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/02/20 21:57	
m&p-Xylene	ug/L	ND	2.0	12/02/20 21:57	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/02/20 21:57	
Methylene Chloride	ug/L	ND	5.0	12/02/20 21:57	v2
Naphthalene	ug/L	ND	1.0	12/02/20 21:57	
o-Xylene	ug/L	ND	1.0	12/02/20 21:57	
p-Isopropyltoluene	ug/L	ND	1.0	12/02/20 21:57	
Styrene	ug/L	ND	1.0	12/02/20 21:57	
Tetrachloroethene	ug/L	ND	1.0	12/02/20 21:57	
Toluene	ug/L	ND	1.0	12/02/20 21:57	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/02/20 21:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/02/20 21:57	
Trichloroethene	ug/L	ND	1.0	12/02/20 21:57	
Trichlorofluoromethane	ug/L	ND	1.0	12/02/20 21:57	
Vinyl acetate	ug/L	ND	2.0	12/02/20 21:57	
Vinyl chloride	ug/L	ND	1.0	12/02/20 21:57	
Xylene (Total)	ug/L	ND	1.0	12/02/20 21:57	
1,2-Dichloroethane-d4 (S)	%	93	70-130	12/02/20 21:57	
4-Bromofluorobenzene (S)	%	100	70-130	12/02/20 21:57	
Toluene-d8 (S)	%	104	70-130	12/02/20 21:57	

LABORATORY CONTROL SAMPLE: 3086936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.8	108	70-130	
1,1,1-Trichloroethane	ug/L	50	43.1	86	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.9	102	70-130	
1,1,2-Trichloroethane	ug/L	50	45.3	91	70-130	
1,1-Dichloroethane	ug/L	50	42.5	85	70-130	
1,1-Dichloroethene	ug/L	50	44.0	88	70-132	
1,1-Dichloropropene	ug/L	50	45.7	91	70-131	
1,2,3-Trichlorobenzene	ug/L	50	52.1	104	70-134	
1,2,3-Trichloropropane	ug/L	50	53.1	106	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.0	106	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.6	103	70-132	
1,2-Dibromoethane (EDB)	ug/L	50	55.6	111	70-130	
1,2-Dichlorobenzene	ug/L	50	53.0	106	70-130	
1,2-Dichloroethane	ug/L	50	40.6	81	70-130	
1,2-Dichloropropane	ug/L	50	46.2	92	70-130	
1,3-Dichlorobenzene	ug/L	50	54.2	108	70-130	
1,3-Dichloropropane	ug/L	50	55.7	111	70-130	

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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.: 92507929

LABORATORY CONTROL SAMPLE: 3086936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	53.4	107	70-130	
2,2-Dichloropropane	ug/L	50	42.9	86	70-130	
2-Butanone (MEK)	ug/L	100	83.8	84	70-133	
2-Chlorotoluene	ug/L	50	53.0	106	70-130	
2-Hexanone	ug/L	100	92.3	92	70-130	
4-Chlorotoluene	ug/L	50	52.1	104	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	78.0	78	70-130	v3
Acetone	ug/L	100	86.7	87	70-144	
Benzene	ug/L	50	45.5	91	70-130	
Bromobenzene	ug/L	50	52.9	106	70-130	
Bromochloromethane	ug/L	50	44.6	89	70-130	
Bromodichloromethane	ug/L	50	43.0	86	70-130	
Bromoform	ug/L	50	50.5	101	70-131	
Bromomethane	ug/L	50	37.0	74	30-177	v3
Carbon tetrachloride	ug/L	50	44.5	89	70-130	
Chlorobenzene	ug/L	50	51.6	103	70-130	
Chloroethane	ug/L	50	39.4	79	46-131	v3
Chloroform	ug/L	50	43.2	86	70-130	
Chloromethane	ug/L	50	40.2	80	49-130	
cis-1,2-Dichloroethene	ug/L	50	40.8	82	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.6	97	70-130	
Dibromochloromethane	ug/L	50	56.9	114	70-130	
Dibromomethane	ug/L	50	45.3	91	70-130	
Dichlorodifluoromethane	ug/L	50	43.1	86	52-134	
Diisopropyl ether	ug/L	50	42.1	84	70-131	
Ethylbenzene	ug/L	50	50.4	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.6	103	70-131	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	44.6	89	70-130	
Methylene Chloride	ug/L	50	39.5	79	68-130	v3
Naphthalene	ug/L	50	52.5	105	70-133	
o-Xylene	ug/L	50	53.7	107	70-130	
p-Isopropyltoluene	ug/L	50	53.5	107	70-130	
Styrene	ug/L	50	52.9	106	70-130	
Tetrachloroethene	ug/L	50	51.5	103	70-130	
Toluene	ug/L	50	42.3	85	70-130	
trans-1,2-Dichloroethene	ug/L	50	42.1	84	70-130	
trans-1,3-Dichloropropene	ug/L	50	46.2	92	70-130	
Trichloroethene	ug/L	50	47.4	95	70-130	
Trichlorofluoromethane	ug/L	50	41.6	83	61-130	
Vinyl acetate	ug/L	100	106	106	70-140	
Vinyl chloride	ug/L	50	40.0	80	59-142	
Xylene (Total)	ug/L	150	158	105	70-130	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			93	70-130	

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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.: 92507929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3086937 3086938

Parameter	Units	92508563001 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	4000	4000	4170	4230	104	106	70-135	1	30	
1,1,1-Trichloroethane	ug/L	ND	4000	4000	3930	3980	98	100	70-148	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	4000	4000	4060	4090	102	102	70-131	1	30	
1,1,2-Trichloroethane	ug/L	ND	4000	4000	3640	3690	91	92	70-136	2	30	
1,1-Dichloroethane	ug/L	ND	4000	4000	3880	3880	97	97	70-147	0	30	
1,1-Dichloroethene	ug/L	ND	4000	4000	4130	4040	103	101	70-158	2	30	
1,1-Dichloropropene	ug/L	ND	4000	4000	4040	4160	101	104	70-149	3	30	
1,2,3-Trichlorobenzene	ug/L	ND	4000	4000	4140	4500	103	112	68-140	8	30	
1,2,3-Trichloropropane	ug/L	ND	4000	4000	3800	3790	95	95	67-137	0	30	
1,2,4-Trichlorobenzene	ug/L	ND	4000	4000	4200	4530	105	113	70-139	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	4000	4000	4160	4260	104	107	69-136	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	4000	4000	4300	4400	107	110	70-137	2	30	
1,2-Dichlorobenzene	ug/L	ND	4000	4000	4450	4650	111	116	70-133	5	30	
1,2-Dichloroethane	ug/L	ND	4000	4000	3560	3610	89	90	67-138	1	30	
1,2-Dichloropropane	ug/L	ND	4000	4000	4060	4120	102	103	70-138	1	30	
1,3-Dichlorobenzene	ug/L	ND	4000	4000	4540	4630	113	116	70-133	2	30	
1,3-Dichloropropane	ug/L	ND	4000	4000	4480	4460	112	111	70-136	0	30	
1,4-Dichlorobenzene	ug/L	ND	4000	4000	4470	4570	112	114	70-133	2	30	
2,2-Dichloropropane	ug/L	ND	4000	4000	3260	3260	82	81	52-155	0	30	
2-Butanone (MEK)	ug/L	ND	8000	8000	7080	6810	89	85	61-147	4	30	
2-Chlorotoluene	ug/L	ND	4000	4000	4480	4560	112	114	70-141	2	30	
2-Hexanone	ug/L	ND	8000	8000	7690	7680	96	96	67-139	0	30	
4-Chlorotoluene	ug/L	ND	4000	4000	4460	4600	112	115	70-135	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	8000	8000	6280	6420	79	80	67-136	2	30	v3
Acetone	ug/L	ND	8000	8000	7840	7690	98	96	55-159	2	30	
Benzene	ug/L	ND	4000	4000	4070	4050	102	101	67-150	0	30	
Bromobenzene	ug/L	ND	4000	4000	4400	4600	110	115	70-134	4	30	
Bromochloromethane	ug/L	ND	4000	4000	4020	4160	100	104	70-146	4	30	
Bromodichloromethane	ug/L	ND	4000	4000	3750	3820	94	95	70-138	2	30	
Bromoform	ug/L	ND	4000	4000	3710	3760	93	94	57-138	1	30	
Bromomethane	ug/L	ND	4000	4000	3050	3540	76	88	10-200	15	30	v3
Carbon tetrachloride	ug/L	ND	4000	4000	4090	4160	102	104	70-147	2	30	
Chlorobenzene	ug/L	ND	4000	4000	4460	4490	111	112	70-137	1	30	
Chloroethane	ug/L	ND	4000	4000	4090	3950	102	99	51-166	3	30	v3
Chloroform	ug/L	ND	4000	4000	3500	3690	87	92	70-144	5	30	
Chloromethane	ug/L	ND	4000	4000	3730	3800	93	95	24-161	2	30	
cis-1,2-Dichloroethene	ug/L	3240	4000	4000	6690	6720	86	87	67-148	1	30	
cis-1,3-Dichloropropene	ug/L	ND	4000	4000	3860	3960	96	99	70-142	3	30	
Dibromochloromethane	ug/L	ND	4000	4000	4400	4470	110	112	68-138	2	30	
Dibromomethane	ug/L	ND	4000	4000	4010	4090	100	102	70-134	2	30	
Dichlorodifluoromethane	ug/L	ND	4000	4000	3710	3710	93	93	43-155	0	30	
Diisopropyl ether	ug/L	ND	4000	4000	3370	3420	84	86	65-146	1	30	
Ethylbenzene	ug/L	ND	4000	4000	4440	4450	111	111	68-143	0	30	
Hexachloro-1,3-butadiene	ug/L	ND	4000	4000	4160	4250	104	106	62-151	2	30	

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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.: 92507929

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3086937 3086938

Parameter	Units	92508563001 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	8000	8000	9260	9220	116	115	53-157	0	30	
Methyl-tert-butyl ether	ug/L	ND	4000	4000	3680	3730	92	93	59-156	1	30	
Methylene Chloride	ug/L	ND	4000	4000	3700	3780	92	94	64-148	2	30	v3
Naphthalene	ug/L	ND	4000	4000	4200	4540	105	114	57-150	8	30	
o-Xylene	ug/L	ND	4000	4000	4660	4600	116	115	68-143	1	30	
p-Isopropyltoluene	ug/L	ND	4000	4000	4380	4620	109	116	70-141	5	30	
Styrene	ug/L	ND	4000	4000	4600	4620	115	116	70-136	0	30	
Tetrachloroethene	ug/L	ND	4000	4000	4430	4380	111	109	70-139	1	30	
Toluene	ug/L	ND	4000	4000	3860	3930	94	96	47-157	2	30	
trans-1,2-Dichloroethene	ug/L	ND	4000	4000	3920	3990	98	100	70-149	2	30	
trans-1,3-Dichloropropene	ug/L	ND	4000	4000	3530	3590	88	90	70-138	2	30	
Trichloroethene	ug/L	19800	4000	4000	24700	24700	123	124	70-149	0	30	
Trichlorofluoromethane	ug/L	ND	4000	4000	4140	3860	104	97	61-154	7	30	
Vinyl acetate	ug/L	ND	8000	8000	8360	8520	105	106	48-156	2	30	
Vinyl chloride	ug/L	477	4000	4000	4140	4210	92	93	55-172	2	30	
Xylene (Total)	ug/L	ND	12000	12000	13900	13800	116	115	66-145	1	30	
1,2-Dichloroethane-d4 (S)	%						96	101	70-130			
4-Bromofluorobenzene (S)	%						100	99	70-130			
Toluene-d8 (S)	%						95	95	70-130			

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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.: 92507929

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: 92507929006

METHOD BLANK: 3081850 Matrix: Water
Associated Lab Samples: 92507929006

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	

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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.: 92507929

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: 92507929003

METHOD BLANK: 3081855 Matrix: Water
Associated Lab Samples: 92507929003

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	

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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.: 92507929

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: 92507929001

METHOD BLANK: 3081862 Matrix: Water
Associated Lab Samples: 92507929001

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	

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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.: 92507929

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: 92507929002, 92507929004, 92507929005

METHOD BLANK: 3083365 Matrix: Water
Associated Lab Samples: 92507929002, 92507929004, 92507929005

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.: 92507929

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.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
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.: 92507929

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92507929001	**RW-1S**	EPA 8260D	582949		
92507929002	**RW-2S**	EPA 8260D	583045		
92507929003	**RW-3S**	EPA 8260D	582948		
92507929004	**RW-1D**	EPA 8260D	583926		
92507929005	**RW-2D**	EPA 8260D	583045		
92507929006	**Trip Blank A**	EPA 8260D	582948		
92507929001	**RW-1S**	EPA 8260D Mod.	582774		
92507929002	**RW-2S**	EPA 8260D Mod.	583085		
92507929003	**RW-3S**	EPA 8260D Mod.	582773		
92507929004	**RW-1D**	EPA 8260D Mod.	583085		
92507929005	**RW-2D**	EPA 8260D Mod.	583085		
92507929006	**Trip Blank A**	EPA 8260D Mod.	582772		

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: WSP

Project #: WO# : 92507929

92507929

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 LDH

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

Cooler Temp Corrected (°C): 1.8, 1.6

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

Samples RW-2S, RW-1D, RW-2D 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# : 92507929**

PM: BV Due Date: 12/03/20

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																6													
3																2													
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.

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: WSP

Project #:

WO# : 92507929
PM: BV Due Date: 12/03/20
CLIENT: 92-WSP

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

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

Date/Initials Person Examining Contents: MH-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? -Includes Date/Time/ID/Analysis Matrix: WT	☐ Yes	☐ No	☐ N/A	9.
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
Recd BW-2S, BW-1D, BW-2D

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 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)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																6													
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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.

System

CHAIN-OF-CUSTODY RECORD

WSP USA Office Address	13530 Dulles Technology Dr. Ste 300 Herndon VA
Project Name	~~Kop~~ Kop Flex
WSP USA Contact Name	Molly Long
Project Location	Hanover MD
WSP USA Contact E-mail	molly.long@wsp.com
Project Number & Task	31401545.010/4
WSP USA Contact Phone	~~202 [illegible]~~ 571 232 5045
Sampler(s) Name(s)	Molly Long, Elliott Martyniewicz
Sampler(s) Signature(s)	

No. 010005

Laboratory Name & Location: Pace, NC

Laboratory Project Manager: Bonnie V

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

92507929

Sample Identification	Matrix	Collection ~~Start~~ Date	Collection ~~Start~~ Time	Collection ~~Stop~~* Date	Collection ~~Stop~~* Time	Number of Containers	VOC by 8260D	8260 - 1,4-Dioxane SIM	537.1 SIMS	Sample Comments
RW-1S	AQ	11/22/2020		13	35	6	X	X		001
RW-2S		11/22/2020		13	40	6	X	X		002
RW-3S		11/22/2020		13	50	6	X	X		003
RW-1D		11/22/2020		14	20	6	X	X		004
RW-2D		11/22/2020		14	50	6	X	X		005
Trip Blank A	—	lab grouded				~~1~~ 2	X	X		006

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Shipment Method	Tracking Number(s)
	11/23/2020	1730				FedEx	8160 4581 0293
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Number of Packages	Custody Seal Number(s)
			LDH PACE HVL	11/24/20	1100		

*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)