WSP | PARSONS BRINCKERHOFF

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Herndon, VA 20171
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February 15, 2017

Erich Weissbart, P.G.
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III
701 Mapes Road
Fort Meade, MD 20755

Re: Quarterly Progress Report No. 1
Former Kop-Flex Facility Site, Hanover, Maryland
Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA

Dear Erich:

On behalf of EMERSUB 16 LLC, a subsidiary of Emerson Electric Co., WSP USA Corp. is submitting this quarterly progress report describing the activities conducted in the fourth quarter 2016 as part of the corrective measures implementation at the Former Kop-Flex Facility Site in Hanover, Maryland. The report also describes the activities planned for the first quarter 2017. This progress report is being submitted to the U.S. Environmental Protection Agency in accordance with the requirement specified in Section IV.C.3 of the Administrative Order on Consent, Docket No. RCRA-03-2016-0170 CA for the site.

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

Sincerely yours,

Robert E. Johnson, PhD.
Senior Technical Manager

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Enclosure

cc: Mr. Stephen Clarke, Emerson Electric Co. (Electronic copy only)
Ms. Richelle Hanson, Maryland Department of the Environment
Mr. Raymond Goins, Trammell Crow Company (Electronic copy only)

CERTIFICATION

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

As to any portion of this quarterly progress report for which I cannot personally verify accuracy, I certify under penalty of law that this 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: Vice-President of Environmental Affairs and Real Estate at Emerson Electric Co., the parent company of EMERSUB 16, LLC

Quarterly Progress Report No. 1

Former Kop-Flex Facility Site

October 2016 through December 2016

Site Name:	Former Kop-Flex Facility
Site Address:	7565 Harmans Road Hanover, Maryland 21076
Consultant:	WSP USA Corp.
Address:	13530 Dulles Technology Drive, Suite 300 Herndon, Virginia 20171
Phone No.:	(703) 709-6500
Project Coordinator:	Eric Johnson
Alternate:	Lisa Bryda

1.0 Activities Completed During October 2016 – December 2016 Reporting Period

1.1 General

- Pursuant to Section XIII.A of the Administrative Order on Consent (Consent Order) for the site, cost estimates were developed for WSP completing the corrective measures activities specified in the Consent Order. The cost estimates were submitted to the U.S. Environmental Protection Agency (EPA), Region III on January 3, 2017.

1.2 Hydraulic Containment System Construction

- WSP and its subcontractors continued with the construction of the building for the groundwater treatment system, and installation of the water conveyance piping, treatment equipment, and utilities. Construction of the building commenced in early August 2016. Specifically, the following construction work was completed during the October 2016 through December 2016 reporting period:

  - Installation of the water conveyance piping and electrical conduit, and vault boxes for the deep groundwater recovery wells along the southern property boundary;
  - Placement of vault boxes for the shallow groundwater recovery wells and installation of water conveyance laterals from these wells to the main conveyance line;
  - Conducting hydrostatic pressure testing of the water conveyance piping and treated effluent piping from the treatment building to the discharge outfall;
  - Completion of the installation of the walls and roof for the treatment equipment building;
  - Placement and securing of the treatment system components on the concrete pads in the building;
  - Installation of transfer pumps and piping connecting the various treatment system components;
  - Installation of well-head piping inside the vault boxes for both the shallow and deep groundwater recovery wells; and
  - Continuing with the addition of electrical components (including interior and exterior lights) and installation of the gas line to the treatment system building.

- During the reporting period, WSP staff continued to participate in weekly construction progress meetings convened by the property owner (Trammell Crow) and its general construction contractor (Glen Arm Building Company).

- For the new and existing monitoring wells, traffic-rated protective covers were set in concrete pads flush with the final surface grade during November 21-22, 2016 and December 13-14, 2016. Given the regrading of the site during development, the top of casing for the majority of the pre-existing monitoring wells had to be adjusted to allow for the placement of the flush-grade protective covers. The location and/or elevation of the new and pre-existing monitoring wells and the recovery wells were surveyed following the installation of the protective covers. The locations of the previous and newly installed monitoring wells are shown in Figure 1.

1.3 Onsite Baseline Groundwater Sampling

- On November 22, 2016, HydraSleeve™ samplers were deployed in all but three of the monitoring wells specified for the collection of water quality data in the Groundwater Monitoring Plan for the site. The samplers placed in these wells were retrieved on December 7 and 8, 2016, which met the minimum 2-week equilibration period. The groundwater samples were analyzed for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) SW-846 Test Method 8260B and 1,4-dioxane using modified USEPA SW-846 Test Method 8260B with selective ion monitoring (SIM). Table 1 lists the monitoring wells sampled using the HydraSleeve™, along with the well screen intervals and sampling depths.

  After installation of the remaining protective covers and pads in mid-December, HydraSleeve™ samplers were deployed in the three remaining monitoring wells – MW-1D, MW-23D, and MW-41D – on December 14, 2016. The samplers were retrieved on January 2, 2017, and the groundwater samples analyzed for VOCs using SW-846 Test Method 8260B and 1,4-dioxane using modified SW-846 Test Method 8260B with SIM. (See Table 1 for information related to the well construction and sample collection for these wells.)

- In conjunction with the early December 2016 retrieval of the HydraSleeve™ samplers, water samples were collected from the shallow and deep recovery wells at the site on December 6-7, 2016, to gather data on VOC concentrations at these groundwater extraction points. Given the long (30+ foot) screen intervals for the recovery wells, samples were collected using the low-flow sampling method with the pump set at depths believed to correspond to the primary zones for VOC transport. The water samples were analyzed for VOCs using USEPA SW-846 Test Method 8260B and 1,4-dioxane using modified SW-846 Test Method 8260B with SIM.

- During the baseline sampling event, a synoptic round of depth to water measurements was obtained from the recovery wells and the majority of the onsite monitoring wells using an electronic water level indicator. Groundwater elevations were determined from the field measurements and survey information for each well. The elevation data were contoured using geostatistical methods (kriging) to characterize the head variations in both the shallow (unconfined) and deep (confined) portions of the aquifer system.

  Groundwater in the shallow zone flows in a generally west-northwest direction across the majority of the site (Figure 2). The relatively high groundwater elevation at the MW-09 location indicates the transient presence of localized southerly flow paths in the eastern portion of the site. Figure 3 depicts the potentiometric surface contours for the confined portion of the Lower Patapsco aquifer

based on the contouring of water level data from the onsite deep monitoring wells. Evaluation of the head contours indicates generally south-southeast flow paths for groundwater in this deeper groundwater zone. Overall, the inferred groundwater flow in both the shallow and deep zones is similar to the flow paths determined from the evaluation of the previous water level data.

- The analytical results for the December 2016 baseline groundwater samples are summarized in Table 2. Copies of the certified laboratory reports for the samples are included in Enclosure A.

  The following site-related VOCs were detected above the Maryland Department of the Environment (MDE) groundwater quality standards in samples from multiple monitoring points during the sampling event:

  - 1,1,1-trichloroethane (TCA)
  - 1,1-dichloroethene (DCE)
  - 1,1-dichloroethane (DCA)
  - 1,4-dioxane

  The analytical results for the primary site-related VOCs listed above are provided in Figure 4 for wells screened in both the shallow (unconfined) and deep (confined) groundwater zones. In the shallow zone, the highest VOC levels were detected in the sample collected from monitoring well MW-16, which is located near the north wall of the South Warehouse in the eastern portion of the loading dock area. Elevated VOC levels *(i.e.*, total concentrations >1 milligram per liter [mg/l]) were also detected in the samples from monitoring wells MW-04 and MW-20 and recovery wells RW-1S and RW-2S. Trace to non-detect levels of the primary VOCs were present in samples from the downgradient monitoring wells, with no detections exceeding the groundwater comparative criteria. Lower VOC concentrations were detected in the groundwater samples collected from the wells completed in the deeper confined zone (Figure 4). For the primary site-related constituents, only 1,1-DCE and 1,4-dioxane were found at levels above the applicable comparative criteria. 1,1-DCE concentrations ranged from below detection limits to 375 µg/l in the sample from monitoring well MW-1D along the southern property boundary. The concentrations of 1,4-dioxane varied from non-detect to greater than 200 µg/l in the samples from monitoring wells MW-1D and MW-16D, and recovery well RW-2D. Overall, the VOC concentrations in the samples from the pre-existing monitoring wells are similar between the December 2016 baseline samples and those collected during previous monitoring events at the site.

2.0 Planned Onsite Activities for Next Reporting Period (January 2017 – March 2017)

- Submit the Use Restriction Implementation Plan and geographical survey coordinates for the restricted areas to the USEPA in accordance with the Consent Order.

- Complete the construction of the treatment equipment building and installation of the water conveyance piping and treatment system.

- Begin the start-up of the hydraulic containment systems in early February 2017.

- Perform groundwater profiling and well installation activities at the Williams-Scotsman property (for which a signed access agreement has already been obtained) to the east of the site.
- Execute an access agreement with Verizon for the performance of groundwater profiling and well installation activities at the Verizon property to the north of the former facility.

3.0 Key Personnel/Facility Changes

During the reporting period, Lisa Bryda replaced Jim Bulman as the Alternate Project Coordinator for WSP.

Figures

VERIZON

POND

STONY RUN

WILLIAMS
SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

MW-27D
MW-23D
MW-03
MW-43
MW-09
MW-39
MW-38R
RW-1S
MW-42
MW-18
RW-2S
MW-5R
MW-40D
RW-3S
MW-44
MW-16
MW-16D
MW-20
MW-04
MW-41D
MW-22D
MW-21D
RW-1D
RW-2D
MW-01D
MW-01
MW-24D

N

LEGEND

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

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FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

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ST. LOUIS, MISSOURI

FIGURE 1

GROUNDWATER EXTRACTION WELL AND MONITORING WELL LOCATIONS

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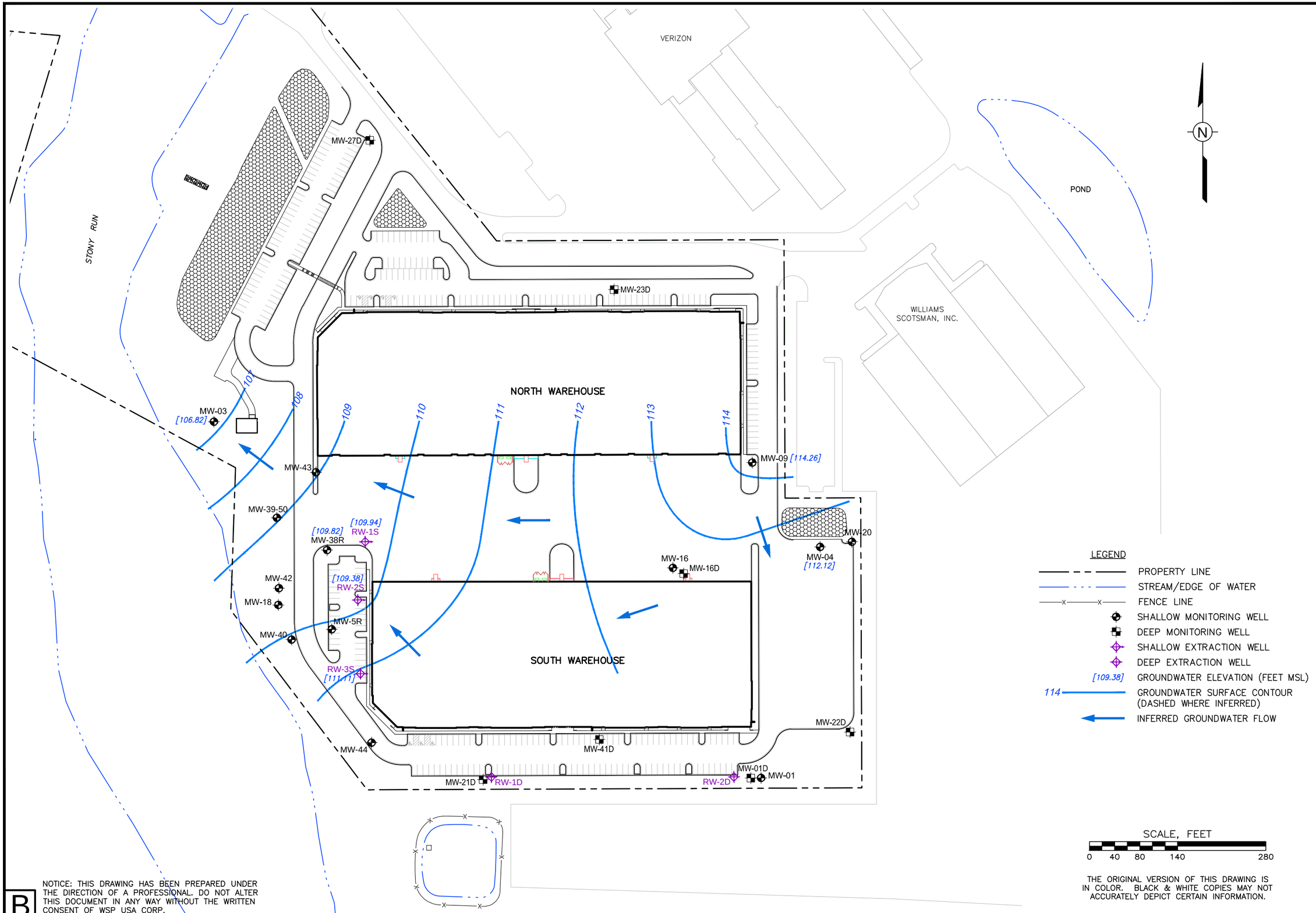

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FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

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FIGURE 2

GROUNDWATER SURFACE
CONTOUR MAP – DECEMBER 2016

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VERIZON

POND

STONY RUN

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

MW-27D

[90.06] MW-23D

90

MW-03

MW-43

MW-09

MW-39-50

RW-1S

MW-38R

MW-42

RW-2S

MW-18

MW-5R

MW-40 [88.96]

RW-3S

MW-16 [89.19] MW-16D

MW-20

MW-04

89

88

87

MW-44

MW-41D

MW-22D [88.07]

[88.50] MW-21D

RW-1D

RW-2D

MW-01D [86.59]

MW-01

N

LEGEND

- PROPERTY LINE
- STREAM/EDGE OF WATER
- FENCE LINE
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW EXTRACTION WELL
- DEEP EXTRACTION WELL
- [89.19] GROUNDWATER ELEVATION (FEET MSL)
- 89 GROUNDWATER SURFACE CONTOUR (DASHED WHERE INFERRED)
- INFERRED GROUNDWATER FLOW

SCALE, FEET

0 40 80 140 280

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HANOVER, MARYLAND

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FIGURE 3

DEEP GROUNDWATER ELEVATION CONTOUR MAP – DECEMBER 2016

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VERIZON

POND

STONY RUN

WILLIAMS SCOTSMAN, INC.

NORTH WAREHOUSE

SOUTH WAREHOUSE

MW-27D	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-23	
1,1-DCA	26.4
1,2-DCA	ND
1,1-DCE	140
1,4-Dioxane	151
1,1,1-TCA	17.0

MW-03	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	4.6
1,1,1-TCA	ND

MW-43	
1,1-DCA	15.9
1,2-DCA	2.1
1,1-DCE	171
1,4-Dioxane	237
1,1,1-TCA	ND

MW-39	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	1.7
1,4-Dioxane	2.5
1,1,1-TCA	ND

MW-38R	
1,1-DCA	3.8
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	18.3
1,1,1-TCA	ND

MW-42	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	4.8
1,1,1-TCA	ND

MW-18	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-40D	
1,1-DCA	2.9
1,2-DCA	ND
1,1-DCE	18.1
1,4-Dioxane	9.4
1,1,1-TCA	ND

MW-5R	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	16.5
1,1,1-TCA	1.4

MW-44	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

RW-1S	
1,1-DCA	468
1,2-DCA	ND
1,1-DCE	957
1,4-Dioxane	1420
1,1,1-TCA	59.3

RW-2S	
1,1-DCA	198
1,2-DCA	ND
1,1-DCE	971
1,4-Dioxane	1190
1,1,1-TCA	232

RW-3S	
1,1-DCA	4.6
1,2-DCA	7.2
1,1-DCE	ND
1,4-Dioxane	5.9
1,1,1-TCA	1.4

MW-09	
1,1-DCA	4.5
1,2-DCA	ND
1,1-DCE	104
1,4-Dioxane	95.5
1,1,1-TCA	ND

MW-16	
1,1-DCA	6420
1,2-DCA	ND
1,1-DCE	26200
1,4-Dioxane	1450
1,1,1-TCA	4390

MW-20	
1,1-DCA	99.7
1,2-DCA	5.1
1,1-DCE	173
1,4-Dioxane	767
1,1,1-TCA	ND

MW-04	
1,1-DCA	259
1,2-DCA	ND
1,1-DCE	1020
1,4-Dioxane	576
1,1,1-TCA	31.7

MW-16D	
1,1-DCA	56.6
1,2-DCA	2.9
1,1-DCE	254
1,4-Dioxane	202
1,1,1-TCA	20.7

MW-21D	
1,1-DCA	2.6
1,2-DCA	ND
1,1-DCE	23.4
1,4-Dioxane	18.6
1,1,1-TCA	ND

RW-1D	
1,1-DCA	4.4
1,2-DCA	ND
1,1-DCE	39.3
1,4-Dioxane	34.4
1,1,1-TCA	ND

MW-41D	
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	2.8
1,1,1-TCA	ND

RW-2D	
1,1-DCA	64
1,2-DCA	3.3
1,1-DCE	257
1,4-Dioxane	206
1,1,1-TCA	26.5

MW-1D	
1,1-DCA	72
1,2-DCA	4.7
1,1-DCE	375
1,4-Dioxane	236
1,1,1-TCA	37.5

MW-22D	
1,1-DCA	2.5
1,2-DCA	ND
1,1-DCE	31.5
1,4-Dioxane	24.5
1,1,1-TCA	ND

MW-27D, MW-23D, MW-03, MW-43, MW-39, MW-38R, RW-1S, MW-42, MW-18, RW-2S, MW-5R, MW-40D, RW-3S, MW-44, MW-41D, MW-21D, RW-1D, RW-2D, MW-01D, MW-01, MW-22D, MW-09, MW-16, MW-16D, MW-20, MW-04, MW-03, MW-43, MW-39, MW-38R, MW-42, MW-18, MW-40D, MW-5R, MW-44

LEGEND

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

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FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

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ST. LOUIS, MISSOURI

FIGURE 4

BASELINE GROUNDWATER SAMPLING RESULTS
ONSITE MONITORING WELLS
DECEMBER 2016

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Tables

Table 1

Baseline Monitoring
Well Sampling Information
Former Kop-Flex Facility Site
Hanover, Maryland
December 2016

Well ID	Top of Casing Elevation (feet MSL)	Depth To Water (feet bgs)	Groundwater Elevation (feet MSL)	Well Depth (feet bgs)	Well Screened Interval (feet bgs)	HydraSleeve Sample Interval (feet bgs)
SHALLOW (UNCONFINED) ZONE						
MW-03	113.6	6.78	106.82	21.7	11.7-21.7	17.7-20.2
MW-04	124.4	12.28	112.12	34.3	24.3-34.3	30.0-32.5
MW-5R	123.5	15.87	107.63	33.0	23.0-33.0	29.0-31.5
MW-09	125.1	10.84	114.26	25.0	15.0-25.0	17.5-20.0
MW-16	124.0	10.92	113.08	50.2	40.2-50.2	42.7-45.2
MW-18	125.1	20.77	104.33	58.3	48.3-58.3	54.0-56.5
MW-20	125.4	14.69	110.71	50.0	45.0-50.0	44.5-46.0
MW-38R	125.4	15.58	109.82	33.3	23.3-33.3	29.0-31.5
MW-39	124.6	20.92	103.68	54.0	44.0-54.0	50.0-52.5
MW-42	125.9	16.18	109.72	33.2	23.2-33.2	29.0-31.5
MW-43	122.8	19.25	103.55	47.5	37.5-47.5	43.0-45.5
MW-44	127.1	14.93	112.17	42.8	32.8-42.8	38.0-40.5
DEEP (CONFINED) ZONE						
MW-1D	129.4	42.81	86.59	112.2	102.2-112.2	108.2-110.7
MW-16D	124.1	34.91	89.19	100.2	90.2-100.2	92.7-95.2
MW-21D	126.3	37.8	88.50	106.0	96.0-106.0	102.0-104.5
MW-22D	128.9	40.78	88.12	114.9	104.9-114.9	111.0-113.5
MW-23D	125.2	35.14	90.06	95.0	85.0-95.0	91.0-93.5
MW-27D	117.2	29.66	87.54	117.3	107.3-117.3	113.0-115.5
MW-40D	124.1	35.14	88.96	95.8	85.8-95.8	91.0-93.5
MW-41D	127.1	41.98	85.12	164.0	154.0-164.0	160.0-162.5

a/ MSL = mean sea level; bgs = below ground surface

Table 2

Baseline Groundwater Sampling Results (a)
Former Kop-Flex Facility Site
Hanover, Maryland
December 2016

Analyte (b)	Groundwater Quality Criteria (ug/L) (c)	SHALLOW GROUNDWATER ZONE												
		Monitoring Wells												
		MW-03 12/8/2016	MW-04 12/7/2016	MW-5R 12/7/2016	MW-09 12/8/2016	MW-16 12/8/2016	MW-200 12/8/2016	MW-18 12/7/2016	MW-20 12/7/2016	MW-38R 12/7/2016	MW-39 12/7/2006	MW-42 12/7/2016	MW-43 12/7/2016	MW-44 12/7/2016
Acetone	550	25.0 U	250 U	25.0 U	25.0 U	5000 U	3120 U	25.0 U	50.0 U	25.0 U	25.0 U	25.0 U	50.0 U	25.0 U
2-Butanone	700	5.0 U	50 U	5.0 U	5.0 U	1000 U	625 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U
Chloroethane	3.6	1.0 U	10 U	1.0 U	1.0 U	200 U	125 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
1,1-Dichloroethane	90	1.0 U	259	1.0 U	4.5	6420	6060	1.0 U	99.7	3.8	1.0 U	1.0 U	15.9	1.0 U
1,2-Dichloroethane	5	1.0 U	10 U	1.0 U	1.0 U	200 U	125 U	1.0 U	5.1	1.0 U	1.0 U	1.0 U	2.1	1.0 U
1,1-Dichloroethene	7	1.0 U	1020	1.0 U	104	26200	24500	1.0 U	173	1.0 U	1.7	1.0 U	171	1.0 U
cis-1,2-Dichloroethene	70	1.0 U	10 U	1.0 U	1.0 U	200 U	125 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	6.7 (d)	4.6	576	16.5	95.5	1450	1390	2.0 U	767	18.3	2.5	4.8	237	2.0 U
Methyl-tert-butyl ether	20	1.0 U	10 U	1.0 U	1.0 U	200 U	125 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	9.3	1.0 U
Methylene Chloride	5	1.0 U	10 U	1.0 U	1.0 U	200 U	125 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
1,1,1-Trichloroethane	200	1.0 U	31.7	1.4	1.0 U	4390	4330	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U

a/ U = not detected at a concentration
above the method detection limit
Highlighted number indicates concentration
above the groundwater quality criteria
b/ All concentrations in micrograms per liter (µg/l)
c/ Groundwater Quality Criteria sources:
RSLs: http://www.mde.maryland.gov/assets/document/
Final%20Update%20No%202.1%20dated%205-20-08(1).pdf
d/ Value represents MDE risk-based cleanup level
e/ MW-200 is a duplicate of MW-16
f/ MW-100 is a duplicate of RW-2D

Table 2

Baseline Groundwater Sampling Results (a)
Former Kop-Flex Facility Site
Hanover, Maryland
December 2016

Analyte (b)	Groundwater Quality Criteria (ug/L) (c)	SHALLOW ZONE			DEEP GROUNDWATER ZONE										
		Recovery Wells			Monitoring Wells								Recovery Wells		
		RW-1S	RW-2S	RW-3S	MW-01D	MW-16D	MW-21D	MW-22D	MW-23D	MW-27D	MW-40D	MW-41D	RW-1D	RW-2D	MW-100 (f)
		12/7/2016	12/6/2016	12/6/2016	1/2/2017	12/8/2016	12/7/2016	12/7/2016	1/2/2017	12/7/2016	12/7/2016	1/2/2017	12/6/2016	12/6/2016	12/6/2016
Acetone	550	125.0 U	125.0 U	25.0 U	50.0 U	50.0 U	25.0 U	25.0 U	50.0 U	25.0 U	25.0 U	25.0 U	172	50.0 U	50.0 U
2-Butanone	700	25.0 U	25.0 U	5.0 U	10.0 U	10.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U	137	10.0 U	10.0 U
Chloroethane	3.6	5.0 U	5.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U
1,1-Dichloroethane	90	468	198	4.6	72	56.6	2.6	2.5	26.4	1.0 U	2.9	1.0 U	4.4	64	66.5
1,2-Dichloroethane	5	5.0 U	5.0 U	1.0 U	4.7	2.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	3.3
1,1-Dichloroethene	7	957	971	7.2	375	254	23.4	31.5	140	1.0 U	18.1	1.0 U	39.3	257	278
cis-1,2-Dichloroethene	70	6.3	5.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U
1,4-Dioxane (p-Dioxane)	6.7 (d)	1420	1190	5.9	236	202	18.6	24.5	151	2.0 U	9.4	2.8	34.4	206	220
Methyl-tert-butyl ether	20	5.0 U	5.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	2 U	2 U
Methylene Chloride	5	10.0 U	10.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	8.3	1.0 U	1.0 U	1.0 U	2 U	4 U	4 U
1,1,1-Trichloroethane	200	59.3	232	1.4	37.5	20.7	1.0 U	4.1	17.0	1.0 U	1.0 U	1.0 U	1.0 U	26.5	28.6

a/ U = not detected at a concentration
above the method detection limit
Highlighted number indicates concentration
above the groundwater quality criteria
b/ All concentrations in micrograms per liter (µg/l)
c/ Groundwater Quality Criteria sources:
RSLs: http://www.mde.maryland.gov/assets/document/
Final%20Update%20No%202.1%20dated%205-20-08(1).pdf
d/ Value represents MDE risk-based cleanup level
e/ MW-200 is a duplicate of MW-16
f/ MW-100 is a duplicate of RW-2D

Enclosure A – Certified Laboratory Reports for Baseline Groundwater Samples

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

December 15, 2016

Eric Johnson
WSP Environmental Strategies
11190 Sunrise Valley Dr.
Suite #300
Reston, VA 20191

RE: Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Dear Eric Johnson:
Enclosed are the analytical results for sample(s) received by the laboratory on December 09, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Keith Green, WSP Environmental Strategies

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

CERTIFICATIONS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
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
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Huntersville, NC 28078
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SAMPLE SUMMARY

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92322711001	**MW-5R**	Water	12/07/16 12:50	12/09/16 10:07
92322711002	**MW-42**	Water	12/07/16 13:20	12/09/16 10:07
92322711003	**MW-18**	Water	12/07/16 13:45	12/09/16 10:07
92322711004	**MW-40D**	Water	12/07/16 14:05	12/09/16 10:07
92322711005	**MW-44**	Water	12/07/16 14:30	12/09/16 10:07
92322711006	**MW-21D**	Water	12/07/16 14:55	12/09/16 10:07
92322711007	**MW-22D**	Water	12/07/16 15:25	12/09/16 10:07
92322711008	**MW-20**	Water	12/07/16 15:50	12/09/16 10:07
92322711009	**MW-04**	Water	12/07/16 16:10	12/09/16 10:07
92322711010	**MW-09**	Water	12/08/16 07:40	12/09/16 10:07
92322711011	**MW-16D**	Water	12/08/16 08:10	12/09/16 10:07
92322711012	**RW-2D-120616**	Water	12/06/16 11:30	12/09/16 10:07
92322711013	**RW-1D-120616**	Water	12/06/16 13:55	12/09/16 10:07
92322711014	**EB-120616**	Water	12/06/16 14:10	12/09/16 10:07
92322711015	**RW-3S-120616**	Water	12/06/16 15:20	12/09/16 10:07
92322711016	**RW-2S-120616**	Water	12/06/16 16:20	12/09/16 10:07
92322711017	**RW-1S-120716**	Water	12/07/16 08:35	12/09/16 10:07
92322711018	**MW-27D-120716**	Water	12/07/16 09:30	12/09/16 10:07
92322711019	**MW-39-120716**	Water	12/07/16 10:00	12/09/16 10:07
92322711020	**MW-43-120716**	Water	12/07/16 10:20	12/09/16 10:07
92322711021	**MW-38R-120716**	Water	12/07/16 10:35	12/09/16 10:07
92322711022	**MW-16-120816**	Water	12/08/16 08:40	12/09/16 10:07
92322711023	**MW-200-120816**	Water	12/08/16 08:00	12/09/16 10:07
92322711024	**MW-03-120816**	Water	12/08/16 09:30	12/09/16 10:07
92322711025	**TRIP BLANKS**	Water	12/07/16 00:00	12/09/16 10:07
92322711026	**MW-100-120616**	Water	12/06/16 12:00	12/09/16 10:07

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92322711001	**MW-5R**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711002	**MW-42**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711003	**MW-18**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711004	**MW-40D**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711005	**MW-44**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711006	**MW-21D**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711007	**MW-22D**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711008	**MW-20**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711009	**MW-04**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711010	**MW-09**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711011	**MW-16D**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711012	**RW-2D-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711013	**RW-1D-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711014	**EB-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711015	**RW-3S-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711016	**RW-2S-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711017	**RW-1S-120716**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711018	**MW-27D-120716**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711019	**MW-39-120716**	EPA 8260	ZDO	64	PASI-C

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260B Mod.	DLK	3	PASI-C
92322711020	**MW-43-120716**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711021	**MW-38R-120716**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711022	**MW-16-120816**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711023	**MW-200-120816**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711024	**MW-03-120816**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711025	**TRIP BLANKS**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92322711026	**MW-100-120616**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-5R **Lab ID: 92322711001** Collected: 12/07/16 12:50 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 07:14	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 07:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 07:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 07:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 07:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 07:14	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 07:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 07:14	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 07:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 07:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 07:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 07:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 07:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 07:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 07:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 07:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 07:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 07:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 07:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:14	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 07:14	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 07:14	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 07:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 07:14	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 07:14	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 07:14	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 07:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 07:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 07:14	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 07:14	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 07:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:14	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-5R **Lab ID: 92322711001** Collected: 12/07/16 12:50 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 07:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 07:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:14	120-82-1	
1,1,1-Trichloroethane	**1.4**	ug/L	1.0	1		12/13/16 07:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 07:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 07:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 07:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 07:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 07:14	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 07:14	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 07:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 07:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 07:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 07:14	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	1		12/13/16 07:14	17060-07-0	
Toluene-d8 (S)	111	%	70-130	1		12/13/16 07:14	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**16.5**	ug/L	2.0	1		12/12/16 14:27	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	50-150	1		12/12/16 14:27	17060-07-0	
Toluene-d8 (S)	89	%	50-150	1		12/12/16 14:27	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-42 **Lab ID: 92322711002** Collected: 12/07/16 13:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 06:04	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 06:04	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 06:04	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 06:04	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 06:04	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 06:04	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 06:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 06:04	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 06:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 06:04	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 06:04	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 06:04	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:04	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 06:04	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 06:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 06:04	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 06:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 06:04	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:04	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 06:04	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 06:04	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 06:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 06:04	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 06:04	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 06:04	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 06:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 06:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 06:04	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 06:04	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 06:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:04	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-42 **Lab ID: 92322711002** Collected: 12/07/16 13:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 06:04	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 06:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 06:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 06:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 06:04	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 06:04	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 06:04	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 06:04	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 06:04	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 06:04	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/13/16 06:04	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		12/13/16 06:04	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 06:04	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**4.8**	ug/L	2.0	1		12/12/16 14:45	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	50-150	1		12/12/16 14:45	17060-07-0	
Toluene-d8 (S)	90	%	50-150	1		12/12/16 14:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-18 **Lab ID: 92322711003** Collected: 12/07/16 13:45 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/12/16 23:57	67-64-1	
Benzene	ND	ug/L	1.0	1		12/12/16 23:57	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/12/16 23:57	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/12/16 23:57	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/16 23:57	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/16 23:57	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/12/16 23:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/12/16 23:57	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/16 23:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/16 23:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/16 23:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/16 23:57	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 23:57	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 23:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/12/16 23:57	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/16 23:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/16 23:57	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/12/16 23:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/12/16 23:57	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/16 23:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/16 23:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:57	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:57	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:57	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:57	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/12/16 23:57	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/12/16 23:57	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/12/16 23:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/12/16 23:57	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/12/16 23:57	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/12/16 23:57	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/12/16 23:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/12/16 23:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/12/16 23:57	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/12/16 23:57	91-20-3	
Styrene	ND	ug/L	1.0	1		12/12/16 23:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 23:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 23:57	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-18 **Lab ID: 92322711003** Collected: 12/07/16 13:45 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/12/16 23:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/16 23:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/16 23:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/16 23:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/16 23:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/16 23:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/16 23:57	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/12/16 23:57	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/12/16 23:57	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/12/16 23:57	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/12/16 23:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/16 23:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/12/16 23:57	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		12/12/16 23:57	17060-07-0	
Toluene-d8 (S)	108	%	70-130	1		12/12/16 23:57	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		12/12/16 15:04	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	50-150	1		12/12/16 15:04	17060-07-0	
Toluene-d8 (S)	89	%	50-150	1		12/12/16 15:04	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-40D **Lab ID: 92322711004** Collected: 12/07/16 14:05 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 07:49	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 07:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 07:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 07:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 07:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 07:49	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 07:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 07:49	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 07:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 07:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 07:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 07:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 07:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 07:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 07:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 07:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 07:49	75-71-8	
1,1-Dichloroethane	**2.9**	ug/L	1.0	1		12/13/16 07:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 07:49	107-06-2	
1,1-Dichloroethene	**18.1**	ug/L	1.0	1		12/13/16 07:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:49	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 07:49	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 07:49	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 07:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 07:49	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 07:49	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 07:49	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 07:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 07:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 07:49	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 07:49	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 07:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:49	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-40D **Lab ID: 92322711004** Collected: 12/07/16 14:05 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 07:49	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 07:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 07:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 07:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 07:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 07:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 07:49	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 07:49	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 07:49	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 07:49	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 07:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 07:49	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/13/16 07:49	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		12/13/16 07:49	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1		12/13/16 07:49	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**9.4**	ug/L	2.0	1		12/12/16 15:23	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	50-150	1		12/12/16 15:23	17060-07-0	
Toluene-d8 (S)	91	%	50-150	1		12/12/16 15:23	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-44 **Lab ID: 92322711005** Collected: 12/07/16 14:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 06:21	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 06:21	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 06:21	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 06:21	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 06:21	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 06:21	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 06:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 06:21	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 06:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 06:21	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 06:21	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 06:21	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:21	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 06:21	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 06:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 06:21	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 06:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 06:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:21	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 06:21	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 06:21	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 06:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 06:21	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 06:21	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 06:21	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 06:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 06:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 06:21	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 06:21	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 06:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:21	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-44 **Lab ID: 92322711005** Collected: 12/07/16 14:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 06:21	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 06:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 06:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 06:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 06:21	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 06:21	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 06:21	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 06:21	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 06:21	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 06:21	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/13/16 06:21	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		12/13/16 06:21	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 06:21	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		12/12/16 15:41	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	50-150	1		12/12/16 15:41	17060-07-0	
Toluene-d8 (S)	89	%	50-150	1		12/12/16 15:41	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-21D **Lab ID: 92322711006** Collected: 12/07/16 14:55 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 00:14	67-64-1	M1
Benzene	ND	ug/L	1.0	1		12/13/16 00:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 00:14	108-86-1	M1
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 00:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 00:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 00:14	75-25-2	M1
Bromomethane	ND	ug/L	2.0	1		12/13/16 00:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 00:14	78-93-3	M1
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 00:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 00:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 00:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 00:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 00:14	96-12-8	M1
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 00:14	124-48-1	M1
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 00:14	106-93-4	M1
Dibromomethane	ND	ug/L	1.0	1		12/13/16 00:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	95-50-1	M1
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	541-73-1	M1
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	106-46-7	M1
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 00:14	75-71-8	
1,1-Dichloroethane	**2.6**	ug/L	1.0	1		12/13/16 00:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 00:14	107-06-2	
1,1-Dichloroethene	**23.4**	ug/L	1.0	1		12/13/16 00:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:14	142-28-9	M1
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:14	10061-01-5	M1
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:14	10061-02-6	M1
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 00:14	108-20-3	M1
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 00:14	123-91-1	L3,M0
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 00:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 00:14	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 00:14	591-78-6	M1
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 00:14	99-87-6	M1
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 00:14	75-09-2	M1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 00:14	108-10-1	M1
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 00:14	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 00:14	91-20-3	M1
Styrene	ND	ug/L	1.0	1		12/13/16 00:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:14	630-20-6	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:14	79-34-5	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-21D **Lab ID: 92322711006** Collected: 12/07/16 14:55 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 00:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 00:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	87-61-6	M1
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:14	120-82-1	M1
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:14	79-00-5	M1
Trichloroethene	ND	ug/L	1.0	1		12/13/16 00:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 00:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 00:14	96-18-4	M1
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 00:14	108-05-4	M1
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 00:14	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 00:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 00:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 00:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 00:14	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		12/13/16 00:14	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 00:14	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**18.6**	ug/L	2.0	1		12/12/16 16:00	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	50-150	1		12/12/16 16:00	17060-07-0	
Toluene-d8 (S)	90	%	50-150	1		12/12/16 16:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-22D **Lab ID: 92322711007** Collected: 12/07/16 15:25 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 03:09	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 03:09	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 03:09	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 03:09	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 03:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 03:09	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 03:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 03:09	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 03:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 03:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 03:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 03:09	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 03:09	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 03:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 03:09	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 03:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 03:09	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 03:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 03:09	75-71-8	
1,1-Dichloroethane	**2.5**	ug/L	1.0	1		12/13/16 03:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 03:09	107-06-2	
1,1-Dichloroethene	**31.5**	ug/L	1.0	1		12/13/16 03:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 03:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 03:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 03:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 03:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 03:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 03:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 03:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 03:09	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 03:09	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 03:09	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 03:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 03:09	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 03:09	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 03:09	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 03:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 03:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 03:09	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 03:09	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 03:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 03:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 03:09	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-22D **Lab ID: 92322711007** Collected: 12/07/16 15:25 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 03:09	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 03:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 03:09	120-82-1	
1,1,1-Trichloroethane	**4.1**	ug/L	1.0	1		12/13/16 03:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 03:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 03:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 03:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 03:09	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 03:09	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 03:09	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 03:09	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 03:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 03:09	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/13/16 03:09	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		12/13/16 03:09	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 03:09	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**24.5**	ug/L	2.0	1		12/12/16 16:19	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	50-150	1		12/12/16 16:19	17060-07-0	
Toluene-d8 (S)	91	%	50-150	1		12/12/16 16:19	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-20 **Lab ID: 92322711008** Collected: 12/07/16 15:50 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		12/13/16 04:54	67-64-1	
Benzene	ND	ug/L	2.0	2		12/13/16 04:54	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/13/16 04:54	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/13/16 04:54	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/13/16 04:54	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/13/16 04:54	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/13/16 04:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		12/13/16 04:54	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/13/16 04:54	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/13/16 04:54	75-00-3	
Chloroform	ND	ug/L	2.0	2		12/13/16 04:54	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/13/16 04:54	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 04:54	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 04:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		12/13/16 04:54	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/13/16 04:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/13/16 04:54	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/13/16 04:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/13/16 04:54	75-71-8	
1,1-Dichloroethane	**99.7**	ug/L	2.0	2		12/13/16 04:54	75-34-3	
1,2-Dichloroethane	**5.1**	ug/L	2.0	2		12/13/16 04:54	107-06-2	
1,1-Dichloroethene	**173**	ug/L	2.0	2		12/13/16 04:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 04:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 04:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 04:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/13/16 04:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 04:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/13/16 04:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 04:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 04:54	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/13/16 04:54	108-20-3	
1,4-Dioxane (p-Dioxane)	**581**	ug/L	300	2		12/13/16 04:54	123-91-1	L1
Ethylbenzene	ND	ug/L	2.0	2		12/13/16 04:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/13/16 04:54	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/13/16 04:54	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/13/16 04:54	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2		12/13/16 04:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/13/16 04:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/13/16 04:54	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/13/16 04:54	91-20-3	
Styrene	ND	ug/L	2.0	2		12/13/16 04:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 04:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 04:54	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-20 **Lab ID: 92322711008** Collected: 12/07/16 15:50 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		12/13/16 04:54	127-18-4	
Toluene	ND	ug/L	2.0	2		12/13/16 04:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 04:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	2.0	2		12/13/16 04:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/13/16 04:54	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/13/16 04:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/13/16 04:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/13/16 04:54	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/13/16 04:54	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/13/16 04:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/13/16 04:54	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/13/16 04:54	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/13/16 04:54	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	2		12/13/16 04:54	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	2		12/13/16 04:54	17060-07-0	
Toluene-d8 (S)	109	%	70-130	2		12/13/16 04:54	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**767**	ug/L	20.0	10		12/12/16 16:38	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	50-150	10		12/12/16 16:38	17060-07-0	
Toluene-d8 (S)	90	%	50-150	10		12/12/16 16:38	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-04 **Lab ID: 92322711009** Collected: 12/07/16 16:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		12/13/16 17:32	67-64-1	
Benzene	ND	ug/L	10.0	10		12/13/16 17:32	71-43-2	
Bromobenzene	ND	ug/L	10.0	10		12/13/16 17:32	108-86-1	
Bromochloromethane	ND	ug/L	10.0	10		12/13/16 17:32	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	10		12/13/16 17:32	75-27-4	
Bromoform	ND	ug/L	10.0	10		12/13/16 17:32	75-25-2	
Bromomethane	ND	ug/L	20.0	10		12/13/16 17:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		12/13/16 17:32	78-93-3	
Carbon tetrachloride	ND	ug/L	10.0	10		12/13/16 17:32	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	108-90-7	
Chloroethane	ND	ug/L	10.0	10		12/13/16 17:32	75-00-3	
Chloroform	ND	ug/L	10.0	10		12/13/16 17:32	67-66-3	
Chloromethane	ND	ug/L	10.0	10		12/13/16 17:32	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	10		12/13/16 17:32	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	10		12/13/16 17:32	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	20.0	10		12/13/16 17:32	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		12/13/16 17:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		12/13/16 17:32	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		12/13/16 17:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		12/13/16 17:32	75-71-8	
1,1-Dichloroethane	**259**	ug/L	10.0	10		12/13/16 17:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	10		12/13/16 17:32	107-06-2	
1,1-Dichloroethene	**1020**	ug/L	10.0	10		12/13/16 17:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	10.0	10		12/13/16 17:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		12/13/16 17:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		12/13/16 17:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	10		12/13/16 17:32	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	10		12/13/16 17:32	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	10		12/13/16 17:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		12/13/16 17:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		12/13/16 17:32	10061-02-6	
Diisopropyl ether	ND	ug/L	10.0	10		12/13/16 17:32	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	1500	10		12/13/16 17:32	123-91-1	L1
Ethylbenzene	ND	ug/L	10.0	10		12/13/16 17:32	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	10		12/13/16 17:32	87-68-3	
2-Hexanone	ND	ug/L	50.0	10		12/13/16 17:32	591-78-6	
p-Isopropyltoluene	ND	ug/L	10.0	10		12/13/16 17:32	99-87-6	
Methylene Chloride	ND	ug/L	20.0	10		12/13/16 17:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0	10		12/13/16 17:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	10.0	10		12/13/16 17:32	1634-04-4	
Naphthalene	ND	ug/L	10.0	10		12/13/16 17:32	91-20-3	
Styrene	ND	ug/L	10.0	10		12/13/16 17:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		12/13/16 17:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		12/13/16 17:32	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-04 **Lab ID: 92322711009** Collected: 12/07/16 16:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	10.0	10		12/13/16 17:32	127-18-4	
Toluene	ND	ug/L	10.0	10		12/13/16 17:32	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	10		12/13/16 17:32	120-82-1	
1,1,1-Trichloroethane	**31.7**	ug/L	10.0	10		12/13/16 17:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		12/13/16 17:32	79-00-5	
Trichloroethene	ND	ug/L	10.0	10		12/13/16 17:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		12/13/16 17:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		12/13/16 17:32	96-18-4	
Vinyl acetate	ND	ug/L	20.0	10		12/13/16 17:32	108-05-4	
Vinyl chloride	ND	ug/L	10.0	10		12/13/16 17:32	75-01-4	
Xylene (Total)	ND	ug/L	10.0	10		12/13/16 17:32	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		12/13/16 17:32	179601-23-1	
o-Xylene	ND	ug/L	10.0	10		12/13/16 17:32	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	10		12/13/16 17:32	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	10		12/13/16 17:32	17060-07-0	
Toluene-d8 (S)	110	%	70-130	10		12/13/16 17:32	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**576**	ug/L	20.0	10		12/13/16 12:42	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	50-150	1		12/12/16 16:56	17060-07-0	
Toluene-d8 (S)	87	%	50-150	1		12/12/16 16:56	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-09 **Lab ID: 92322711010** Collected: 12/08/16 07:40 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 18:07	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 18:07	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 18:07	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 18:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 18:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 18:07	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 18:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 18:07	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 18:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 18:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 18:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 18:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 18:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 18:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 18:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 18:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 18:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 18:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 18:07	75-71-8	
1,1-Dichloroethane	**4.5**	ug/L	1.0	1		12/13/16 18:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 18:07	107-06-2	
1,1-Dichloroethene	**104**	ug/L	1.0	1		12/13/16 18:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 18:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 18:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:07	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 18:07	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 18:07	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 18:07	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 18:07	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 18:07	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 18:07	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 18:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 18:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 18:07	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 18:07	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 18:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 18:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 18:07	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-09 **Lab ID: 92322711010** Collected: 12/08/16 07:40 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 18:07	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 18:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 18:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 18:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 18:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 18:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 18:07	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 18:07	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 18:07	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 18:07	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 18:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 18:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/13/16 18:07	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/13/16 18:07	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 18:07	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**95.5**	ug/L	5.0	2.5		12/12/16 17:15	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	50-150	2.5		12/12/16 17:15	17060-07-0	
Toluene-d8 (S)	88	%	50-150	2.5		12/12/16 17:15	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-16D **Lab ID: 92322711011** Collected: 12/08/16 08:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		12/13/16 17:14	67-64-1	
Benzene	ND	ug/L	2.0	2		12/13/16 17:14	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/13/16 17:14	108-86-1	M1
Bromochloromethane	ND	ug/L	2.0	2		12/13/16 17:14	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/13/16 17:14	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/13/16 17:14	75-25-2	M1
Bromomethane	ND	ug/L	4.0	2		12/13/16 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		12/13/16 17:14	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/13/16 17:14	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/13/16 17:14	75-00-3	
Chloroform	ND	ug/L	2.0	2		12/13/16 17:14	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/13/16 17:14	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 17:14	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 17:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		12/13/16 17:14	96-12-8	M1
Dibromochloromethane	ND	ug/L	2.0	2		12/13/16 17:14	124-48-1	M1
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/13/16 17:14	106-93-4	M1
Dibromomethane	ND	ug/L	2.0	2		12/13/16 17:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	95-50-1	M1
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	541-73-1	M1
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	106-46-7	M1
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/13/16 17:14	75-71-8	
1,1-Dichloroethane	**56.6**	ug/L	2.0	2		12/13/16 17:14	75-34-3	M1
1,2-Dichloroethane	**2.9**	ug/L	2.0	2		12/13/16 17:14	107-06-2	
1,1-Dichloroethene	**254**	ug/L	2.0	2		12/13/16 17:14	75-35-4	M1
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 17:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/13/16 17:14	142-28-9	M1
2,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 17:14	594-20-7	M1
1,1-Dichloropropene	ND	ug/L	2.0	2		12/13/16 17:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 17:14	10061-01-5	M1
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 17:14	10061-02-6	M1
Diisopropyl ether	ND	ug/L	2.0	2		12/13/16 17:14	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	300	2		12/13/16 17:14	123-91-1	L3,M0
Ethylbenzene	ND	ug/L	2.0	2		12/13/16 17:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/13/16 17:14	87-68-3	M1
2-Hexanone	ND	ug/L	10.0	2		12/13/16 17:14	591-78-6	M1
p-Isopropyltoluene	ND	ug/L	2.0	2		12/13/16 17:14	99-87-6	M1
Methylene Chloride	ND	ug/L	4.0	2		12/13/16 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/13/16 17:14	108-10-1	M1
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/13/16 17:14	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/13/16 17:14	91-20-3	M1
Styrene	ND	ug/L	2.0	2		12/13/16 17:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 17:14	630-20-6	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 17:14	79-34-5	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-16D **Lab ID: 92322711011** Collected: 12/08/16 08:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		12/13/16 17:14	127-18-4	
Toluene	ND	ug/L	2.0	2		12/13/16 17:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	87-61-6	M1
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 17:14	120-82-1	M1
1,1,1-Trichloroethane	**20.7**	ug/L	2.0	2		12/13/16 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/13/16 17:14	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/13/16 17:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/13/16 17:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/13/16 17:14	96-18-4	M1
Vinyl acetate	ND	ug/L	4.0	2		12/13/16 17:14	108-05-4	M1
Vinyl chloride	ND	ug/L	2.0	2		12/13/16 17:14	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/13/16 17:14	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/13/16 17:14	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/13/16 17:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	2		12/13/16 17:14	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	2		12/13/16 17:14	17060-07-0	
Toluene-d8 (S)	107	%	70-130	2		12/13/16 17:14	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**202**	ug/L	10.0	5		12/12/16 17:34	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	50-150	5		12/12/16 17:34	17060-07-0	
Toluene-d8 (S)	88	%	50-150	5		12/12/16 17:34	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-2D-120616 **Lab ID: 92322711012** Collected: 12/06/16 11:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		12/14/16 10:51	67-64-1	
Benzene	ND	ug/L	2.0	2		12/14/16 10:51	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/14/16 10:51	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/14/16 10:51	74-97-5	M1
Bromodichloromethane	ND	ug/L	2.0	2		12/14/16 10:51	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/14/16 10:51	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/14/16 10:51	74-83-9	M1
2-Butanone (MEK)	ND	ug/L	10.0	2		12/14/16 10:51	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/14/16 10:51	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/14/16 10:51	75-00-3	M1
Chloroform	ND	ug/L	2.0	2		12/14/16 10:51	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/14/16 10:51	74-87-3	M1
2-Chlorotoluene	ND	ug/L	2.0	2		12/14/16 10:51	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/14/16 10:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		12/14/16 10:51	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/14/16 10:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/14/16 10:51	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/14/16 10:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/14/16 10:51	75-71-8	
1,1-Dichloroethane	**64.0**	ug/L	2.0	2		12/14/16 10:51	75-34-3	
1,2-Dichloroethane	**3.3**	ug/L	2.0	2		12/14/16 10:51	107-06-2	
1,1-Dichloroethene	**257**	ug/L	2.0	2		12/14/16 10:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/14/16 10:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/14/16 10:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/14/16 10:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/14/16 10:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/14/16 10:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/14/16 10:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/14/16 10:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/14/16 10:51	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/14/16 10:51	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	300	2		12/14/16 10:51	123-91-1	L3,M0, R1
Ethylbenzene	ND	ug/L	2.0	2		12/14/16 10:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/14/16 10:51	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/14/16 10:51	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/14/16 10:51	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2		12/14/16 10:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/14/16 10:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/14/16 10:51	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/14/16 10:51	91-20-3	
Styrene	ND	ug/L	2.0	2		12/14/16 10:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/14/16 10:51	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-2D-120616 **Lab ID: 92322711012** Collected: 12/06/16 11:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/14/16 10:51	79-34-5	
Tetrachloroethene	ND	ug/L	2.0	2		12/14/16 10:51	127-18-4	
Toluene	ND	ug/L	2.0	2		12/14/16 10:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/14/16 10:51	120-82-1	
1,1,1-Trichloroethane	**26.5**	ug/L	2.0	2		12/14/16 10:51	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/14/16 10:51	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/14/16 10:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/14/16 10:51	75-69-4	M1
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/14/16 10:51	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/14/16 10:51	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/14/16 10:51	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/14/16 10:51	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/14/16 10:51	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/14/16 10:51	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	2		12/14/16 10:51	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	2		12/14/16 10:51	17060-07-0	
Toluene-d8 (S)	107	%	70-130	2		12/14/16 10:51	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**206**	ug/L	5.0	2.5		12/12/16 23:11	123-91-1	M1
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%	50-150	2.5		12/12/16 23:11	17060-07-0	
Toluene-d8 (S)	78	%	50-150	2.5		12/12/16 23:11	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-1D-120616 **Lab ID: 92322711013** Collected: 12/06/16 13:55 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	**172**	ug/L	25.0	1		12/13/16 18:42	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 18:42	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 18:42	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 18:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 18:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 18:42	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 18:42	74-83-9	
2-Butanone (MEK)	**137**	ug/L	5.0	1		12/13/16 18:42	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 18:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 18:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 18:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 18:42	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 18:42	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 18:42	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 18:42	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 18:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 18:42	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 18:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 18:42	75-71-8	
1,1-Dichloroethane	**4.4**	ug/L	1.0	1		12/13/16 18:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 18:42	107-06-2	
1,1-Dichloroethene	**39.3**	ug/L	1.0	1		12/13/16 18:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 18:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 18:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 18:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 18:42	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 18:42	108-20-3	
1,4-Dioxane (p-Dioxane)	**506**	ug/L	150	1		12/13/16 18:42	123-91-1	L1
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 18:42	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 18:42	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 18:42	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 18:42	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 18:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 18:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 18:42	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 18:42	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 18:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 18:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 18:42	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-1D-120616 **Lab ID: 92322711013** Collected: 12/06/16 13:55 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 18:42	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 18:42	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 18:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 18:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 18:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 18:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 18:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 18:42	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 18:42	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 18:42	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 18:42	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 18:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 18:42	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/13/16 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		12/13/16 18:42	17060-07-0	
Toluene-d8 (S)	108	%	70-130	1		12/13/16 18:42	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**34.4**	ug/L	2.0	1		12/13/16 14:53	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 14:53	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 14:53	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: EB-120616 **Lab ID: 92322711014** Collected: 12/06/16 14:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/12/16 15:14	67-64-1	
Benzene	ND	ug/L	1.0	1		12/12/16 15:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/12/16 15:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/12/16 15:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/16 15:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/16 15:14	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/12/16 15:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/12/16 15:14	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/16 15:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/16 15:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/16 15:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/16 15:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 15:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 15:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/12/16 15:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/16 15:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/16 15:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/12/16 15:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/12/16 15:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/16 15:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/16 15:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/16 15:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 15:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 15:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 15:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/12/16 15:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 15:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/12/16 15:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 15:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 15:14	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/12/16 15:14	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/12/16 15:14	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/12/16 15:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/12/16 15:14	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/12/16 15:14	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/12/16 15:14	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/12/16 15:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/12/16 15:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/12/16 15:14	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/12/16 15:14	91-20-3	
Styrene	ND	ug/L	1.0	1		12/12/16 15:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 15:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 15:14	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: EB-120616 **Lab ID: 92322711014** Collected: 12/06/16 14:10 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/12/16 15:14	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/16 15:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 15:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/16 15:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/16 15:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/16 15:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/16 15:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/16 15:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/12/16 15:14	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/12/16 15:14	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/12/16 15:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/12/16 15:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/16 15:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/12/16 15:14	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		12/12/16 15:14	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/12/16 15:14	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		12/12/16 18:49	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	50-150	1		12/12/16 18:49	17060-07-0	
Toluene-d8 (S)	86	%	50-150	1		12/12/16 18:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-3S-120616 **Lab ID: 92322711015** Collected: 12/06/16 15:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/14/16 10:34	67-64-1	
Benzene	ND	ug/L	1.0	1		12/14/16 10:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/14/16 10:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/14/16 10:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/14/16 10:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/14/16 10:34	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/14/16 10:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/14/16 10:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/14/16 10:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/14/16 10:34	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/14/16 10:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/14/16 10:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/14/16 10:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/14/16 10:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/14/16 10:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/14/16 10:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/14/16 10:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/14/16 10:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/14/16 10:34	75-71-8	
1,1-Dichloroethane	**4.6**	ug/L	1.0	1		12/14/16 10:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/14/16 10:34	107-06-2	
1,1-Dichloroethene	**7.2**	ug/L	1.0	1		12/14/16 10:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/14/16 10:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/14/16 10:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/14/16 10:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/14/16 10:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/14/16 10:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/14/16 10:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/14/16 10:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/14/16 10:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/14/16 10:34	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/14/16 10:34	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/14/16 10:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/14/16 10:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/14/16 10:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/14/16 10:34	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/14/16 10:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/14/16 10:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/14/16 10:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/14/16 10:34	91-20-3	
Styrene	ND	ug/L	1.0	1		12/14/16 10:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/14/16 10:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/14/16 10:34	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-3S-120616 **Lab ID: 92322711015** Collected: 12/06/16 15:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/14/16 10:34	127-18-4	
Toluene	ND	ug/L	1.0	1		12/14/16 10:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/14/16 10:34	120-82-1	
1,1,1-Trichloroethane	**1.4**	ug/L	1.0	1		12/14/16 10:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/14/16 10:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/14/16 10:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/14/16 10:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/14/16 10:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/14/16 10:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/14/16 10:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/14/16 10:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/14/16 10:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/14/16 10:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/14/16 10:34	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		12/14/16 10:34	17060-07-0	
Toluene-d8 (S)	110	%	70-130	1		12/14/16 10:34	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**5.9**	ug/L	2.0	1		12/12/16 19:08	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	50-150	1		12/12/16 19:08	17060-07-0	
Toluene-d8 (S)	85	%	50-150	1		12/12/16 19:08	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-2S-120616 **Lab ID: 92322711016** Collected: 12/06/16 16:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	125	5		12/14/16 05:10	67-64-1	
Benzene	ND	ug/L	5.0	5		12/14/16 05:10	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		12/14/16 05:10	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		12/14/16 05:10	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		12/14/16 05:10	75-27-4	
Bromoform	ND	ug/L	5.0	5		12/14/16 05:10	75-25-2	
Bromomethane	ND	ug/L	10.0	5		12/14/16 05:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		12/14/16 05:10	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	5		12/14/16 05:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	108-90-7	
Chloroethane	ND	ug/L	5.0	5		12/14/16 05:10	75-00-3	
Chloroform	ND	ug/L	5.0	5		12/14/16 05:10	67-66-3	
Chloromethane	ND	ug/L	5.0	5		12/14/16 05:10	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 05:10	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 05:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	5		12/14/16 05:10	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		12/14/16 05:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		12/14/16 05:10	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		12/14/16 05:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		12/14/16 05:10	75-71-8	
1,1-Dichloroethane	**198**	ug/L	5.0	5		12/14/16 05:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		12/14/16 05:10	107-06-2	
1,1-Dichloroethene	**971**	ug/L	5.0	5		12/14/16 05:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 05:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 05:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 05:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		12/14/16 05:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 05:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		12/14/16 05:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 05:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 05:10	10061-02-6	
Diisopropyl ether	ND	ug/L	5.0	5		12/14/16 05:10	108-20-3	
1,4-Dioxane (p-Dioxane)	**884**	ug/L	750	5		12/14/16 05:10	123-91-1	L1
Ethylbenzene	ND	ug/L	5.0	5		12/14/16 05:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		12/14/16 05:10	87-68-3	
2-Hexanone	ND	ug/L	25.0	5		12/14/16 05:10	591-78-6	
p-Isopropyltoluene	ND	ug/L	5.0	5		12/14/16 05:10	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		12/14/16 05:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		12/14/16 05:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		12/14/16 05:10	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		12/14/16 05:10	91-20-3	
Styrene	ND	ug/L	5.0	5		12/14/16 05:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 05:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 05:10	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-2S-120616 **Lab ID: 92322711016** Collected: 12/06/16 16:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	5.0	5		12/14/16 05:10	127-18-4	
Toluene	ND	ug/L	5.0	5		12/14/16 05:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 05:10	120-82-1	
1,1,1-Trichloroethane	**232**	ug/L	5.0	5		12/14/16 05:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		12/14/16 05:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		12/14/16 05:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		12/14/16 05:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		12/14/16 05:10	96-18-4	
Vinyl acetate	ND	ug/L	10.0	5		12/14/16 05:10	108-05-4	
Vinyl chloride	ND	ug/L	5.0	5		12/14/16 05:10	75-01-4	
Xylene (Total)	ND	ug/L	5.0	5		12/14/16 05:10	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		12/14/16 05:10	179601-23-1	
o-Xylene	ND	ug/L	5.0	5		12/14/16 05:10	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	5		12/14/16 05:10	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	5		12/14/16 05:10	17060-07-0	
Toluene-d8 (S)	105	%	70-130	5		12/14/16 05:10	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**1190**	ug/L	50.0	25		12/13/16 13:01	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	50-150	1		12/12/16 19:26	17060-07-0	
Toluene-d8 (S)	84	%	50-150	1		12/12/16 19:26	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-1S-120716 **Lab ID: 92322711017** Collected: 12/07/16 08:35 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	125	5		12/14/16 17:28	67-64-1	
Benzene	ND	ug/L	5.0	5		12/14/16 17:28	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		12/14/16 17:28	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		12/14/16 17:28	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		12/14/16 17:28	75-27-4	
Bromoform	ND	ug/L	5.0	5		12/14/16 17:28	75-25-2	
Bromomethane	ND	ug/L	10.0	5		12/14/16 17:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		12/14/16 17:28	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	5		12/14/16 17:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	108-90-7	
Chloroethane	ND	ug/L	5.0	5		12/14/16 17:28	75-00-3	
Chloroform	ND	ug/L	5.0	5		12/14/16 17:28	67-66-3	
Chloromethane	ND	ug/L	5.0	5		12/14/16 17:28	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 17:28	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 17:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	5		12/14/16 17:28	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		12/14/16 17:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		12/14/16 17:28	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		12/14/16 17:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		12/14/16 17:28	75-71-8	
1,1-Dichloroethane	**468**	ug/L	5.0	5		12/14/16 17:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		12/14/16 17:28	107-06-2	
1,1-Dichloroethene	**957**	ug/L	5.0	5		12/14/16 17:28	75-35-4	
cis-1,2-Dichloroethene	**6.3**	ug/L	5.0	5		12/14/16 17:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 17:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 17:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		12/14/16 17:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 17:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		12/14/16 17:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 17:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 17:28	10061-02-6	
Diisopropyl ether	ND	ug/L	5.0	5		12/14/16 17:28	108-20-3	
1,4-Dioxane (p-Dioxane)	**905**	ug/L	750	5		12/14/16 17:28	123-91-1	L1
Ethylbenzene	ND	ug/L	5.0	5		12/14/16 17:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		12/14/16 17:28	87-68-3	
2-Hexanone	ND	ug/L	25.0	5		12/14/16 17:28	591-78-6	
p-Isopropyltoluene	ND	ug/L	5.0	5		12/14/16 17:28	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		12/14/16 17:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		12/14/16 17:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		12/14/16 17:28	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		12/14/16 17:28	91-20-3	
Styrene	ND	ug/L	5.0	5		12/14/16 17:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 17:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 17:28	79-34-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: RW-1S-120716 **Lab ID: 92322711017** Collected: 12/07/16 08:35 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	5.0	5		12/14/16 17:28	127-18-4	
Toluene	ND	ug/L	5.0	5		12/14/16 17:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 17:28	120-82-1	
1,1,1-Trichloroethane	**59.3**	ug/L	5.0	5		12/14/16 17:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		12/14/16 17:28	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		12/14/16 17:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		12/14/16 17:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		12/14/16 17:28	96-18-4	
Vinyl acetate	ND	ug/L	10.0	5		12/14/16 17:28	108-05-4	
Vinyl chloride	ND	ug/L	5.0	5		12/14/16 17:28	75-01-4	
Xylene (Total)	ND	ug/L	5.0	5		12/14/16 17:28	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		12/14/16 17:28	179601-23-1	
o-Xylene	ND	ug/L	5.0	5		12/14/16 17:28	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	5		12/14/16 17:28	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	5		12/14/16 17:28	17060-07-0	
Toluene-d8 (S)	105	%	70-130	5		12/14/16 17:28	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**1420**	ug/L	50.0	25		12/13/16 13:20	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	50-150	1		12/12/16 19:45	17060-07-0	
Toluene-d8 (S)	84	%	50-150	1		12/12/16 19:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-27D-120716 **Lab ID: 92322711018** Collected: 12/07/16 09:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 06:39	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 06:39	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 06:39	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 06:39	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 06:39	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 06:39	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 06:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 06:39	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 06:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 06:39	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 06:39	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 06:39	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:39	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 06:39	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 06:39	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 06:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 06:39	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 06:39	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 06:39	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 06:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 06:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:39	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:39	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 06:39	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:39	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 06:39	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 06:39	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 06:39	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 06:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 06:39	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 06:39	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 06:39	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 06:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 06:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 06:39	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 06:39	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 06:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 06:39	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-27D-120716 **Lab ID: 92322711018** Collected: 12/07/16 09:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 06:39	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 06:39	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 06:39	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 06:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 06:39	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 06:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 06:39	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 06:39	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 06:39	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 06:39	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 06:39	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 06:39	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		12/13/16 06:39	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		12/13/16 06:39	17060-07-0	
Toluene-d8 (S)	109	%	70-130	1		12/13/16 06:39	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		12/13/16 16:26	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	50-150	1		12/13/16 16:26	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 16:26	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-39-120716 **Lab ID: 92322711019** Collected: 12/07/16 10:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 02:34	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 02:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 02:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 02:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 02:34	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 02:34	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 02:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 02:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 02:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 02:34	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 02:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 02:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 02:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 02:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 02:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 02:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 02:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 02:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 02:34	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	1		12/13/16 02:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 02:34	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 02:34	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 02:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 02:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 02:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 02:34	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 02:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 02:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 02:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 02:34	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 02:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:34	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-39-120716 **Lab ID: 92322711019** Collected: 12/07/16 10:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 02:34	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 02:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 02:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 02:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 02:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 02:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 02:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 02:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 02:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 02:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 02:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 02:34	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/13/16 02:34	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/13/16 02:34	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 02:34	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**2.5**	ug/L	2.0	1		12/13/16 16:45	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%	50-150	1		12/13/16 16:45	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 16:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-43-120716 **Lab ID: 92322711020** Collected: 12/07/16 10:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		12/13/16 16:57	67-64-1	
Benzene	ND	ug/L	2.0	2		12/13/16 16:57	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/13/16 16:57	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/13/16 16:57	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/13/16 16:57	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/13/16 16:57	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/13/16 16:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		12/13/16 16:57	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/13/16 16:57	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/13/16 16:57	75-00-3	
Chloroform	ND	ug/L	2.0	2		12/13/16 16:57	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/13/16 16:57	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 16:57	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/13/16 16:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		12/13/16 16:57	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/13/16 16:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/13/16 16:57	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/13/16 16:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/13/16 16:57	75-71-8	
1,1-Dichloroethane	**15.9**	ug/L	2.0	2		12/13/16 16:57	75-34-3	
1,2-Dichloroethane	**2.1**	ug/L	2.0	2		12/13/16 16:57	107-06-2	
1,1-Dichloroethene	**171**	ug/L	2.0	2		12/13/16 16:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 16:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/13/16 16:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 16:57	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/13/16 16:57	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/13/16 16:57	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/13/16 16:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 16:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/13/16 16:57	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/13/16 16:57	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	300	2		12/13/16 16:57	123-91-1	L3
Ethylbenzene	ND	ug/L	2.0	2		12/13/16 16:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/13/16 16:57	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/13/16 16:57	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/13/16 16:57	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2		12/13/16 16:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/13/16 16:57	108-10-1	
Methyl-tert-butyl ether	**9.3**	ug/L	2.0	2		12/13/16 16:57	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/13/16 16:57	91-20-3	
Styrene	ND	ug/L	2.0	2		12/13/16 16:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 16:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/13/16 16:57	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-43-120716 **Lab ID: 92322711020** Collected: 12/07/16 10:20 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		12/13/16 16:57	127-18-4	
Toluene	ND	ug/L	2.0	2		12/13/16 16:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/13/16 16:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	2.0	2		12/13/16 16:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/13/16 16:57	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/13/16 16:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/13/16 16:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/13/16 16:57	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/13/16 16:57	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/13/16 16:57	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/13/16 16:57	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/13/16 16:57	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/13/16 16:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	2		12/13/16 16:57	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	2		12/13/16 16:57	17060-07-0	
Toluene-d8 (S)	106	%	70-130	2		12/13/16 16:57	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**237**	ug/L	10.0	5		12/13/16 13:38	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	50-150	1		12/13/16 00:07	17060-07-0	
Toluene-d8 (S)	77	%	50-150	1		12/13/16 00:07	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-38R-120716 **Lab ID: 92322711021** Collected: 12/07/16 10:35 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 07:31	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 07:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 07:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 07:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 07:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 07:31	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 07:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 07:31	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 07:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 07:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 07:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 07:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 07:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 07:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 07:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 07:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 07:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 07:31	75-71-8	
1,1-Dichloroethane	**3.8**	ug/L	1.0	1		12/13/16 07:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 07:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 07:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 07:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 07:31	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 07:31	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 07:31	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 07:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 07:31	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 07:31	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 07:31	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 07:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 07:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 07:31	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 07:31	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 07:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 07:31	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-38R-120716 **Lab ID: 92322711021** Collected: 12/07/16 10:35 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 07:31	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 07:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 07:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 07:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 07:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 07:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 07:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 07:31	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 07:31	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 07:31	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 07:31	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 07:31	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 07:31	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 07:31	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		12/13/16 07:31	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 07:31	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**18.3**	ug/L	2.0	1		12/13/16 15:12	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	85	%	50-150	1		12/13/16 15:12	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 15:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-16-120816 **Lab ID: 92322711022** Collected: 12/08/16 08:40 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	5000	200		12/13/16 17:49	67-64-1	
Benzene	ND	ug/L	200	200		12/13/16 17:49	71-43-2	
Bromobenzene	ND	ug/L	200	200		12/13/16 17:49	108-86-1	
Bromochloromethane	ND	ug/L	200	200		12/13/16 17:49	74-97-5	
Bromodichloromethane	ND	ug/L	200	200		12/13/16 17:49	75-27-4	
Bromoform	ND	ug/L	200	200		12/13/16 17:49	75-25-2	
Bromomethane	ND	ug/L	400	200		12/13/16 17:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	200		12/13/16 17:49	78-93-3	
Carbon tetrachloride	ND	ug/L	200	200		12/13/16 17:49	56-23-5	
Chlorobenzene	ND	ug/L	200	200		12/13/16 17:49	108-90-7	
Chloroethane	ND	ug/L	200	200		12/13/16 17:49	75-00-3	
Chloroform	ND	ug/L	200	200		12/13/16 17:49	67-66-3	
Chloromethane	ND	ug/L	200	200		12/13/16 17:49	74-87-3	
2-Chlorotoluene	ND	ug/L	200	200		12/13/16 17:49	95-49-8	
4-Chlorotoluene	ND	ug/L	200	200		12/13/16 17:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	400	200		12/13/16 17:49	96-12-8	
Dibromochloromethane	ND	ug/L	200	200		12/13/16 17:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	200	200		12/13/16 17:49	106-93-4	
Dibromomethane	ND	ug/L	200	200		12/13/16 17:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	200	200		12/13/16 17:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	200	200		12/13/16 17:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	200	200		12/13/16 17:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	200	200		12/13/16 17:49	75-71-8	
1,1-Dichloroethane	**6420**	ug/L	200	200		12/13/16 17:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	200	200		12/13/16 17:49	107-06-2	
1,1-Dichloroethene	**26200**	ug/L	200	200		12/13/16 17:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	200	200		12/13/16 17:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	200	200		12/13/16 17:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	200	200		12/13/16 17:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	200	200		12/13/16 17:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	200	200		12/13/16 17:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	200	200		12/13/16 17:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	200	200		12/13/16 17:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	200		12/13/16 17:49	10061-02-6	
Diisopropyl ether	ND	ug/L	200	200		12/13/16 17:49	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	30000	200		12/13/16 17:49	123-91-1	L3
Ethylbenzene	ND	ug/L	200	200		12/13/16 17:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	200	200		12/13/16 17:49	87-68-3	
2-Hexanone	ND	ug/L	1000	200		12/13/16 17:49	591-78-6	
p-Isopropyltoluene	ND	ug/L	200	200		12/13/16 17:49	99-87-6	
Methylene Chloride	ND	ug/L	400	200		12/13/16 17:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	200		12/13/16 17:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	200	200		12/13/16 17:49	1634-04-4	
Naphthalene	ND	ug/L	200	200		12/13/16 17:49	91-20-3	
Styrene	ND	ug/L	200	200		12/13/16 17:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	200	200		12/13/16 17:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	200	200		12/13/16 17:49	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-16-120816 **Lab ID: 92322711022** Collected: 12/08/16 08:40 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	200	200		12/13/16 17:49	127-18-4	
Toluene	ND	ug/L	200	200		12/13/16 17:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	200	200		12/13/16 17:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	200	200		12/13/16 17:49	120-82-1	
1,1,1-Trichloroethane	**4390**	ug/L	200	200		12/13/16 17:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	200	200		12/13/16 17:49	79-00-5	
Trichloroethene	ND	ug/L	200	200		12/13/16 17:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	200	200		12/13/16 17:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	200	200		12/13/16 17:49	96-18-4	
Vinyl acetate	ND	ug/L	400	200		12/13/16 17:49	108-05-4	
Vinyl chloride	ND	ug/L	200	200		12/13/16 17:49	75-01-4	
Xylene (Total)	ND	ug/L	200	200		12/13/16 17:49	1330-20-7	
m&p-Xylene	ND	ug/L	400	200		12/13/16 17:49	179601-23-1	
o-Xylene	ND	ug/L	200	200		12/13/16 17:49	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	200		12/13/16 17:49	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130	200		12/13/16 17:49	17060-07-0	
Toluene-d8 (S)	110	%	70-130	200		12/13/16 17:49	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**1450**	ug/L	40.0	20		12/13/16 13:57	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%	50-150	5		12/13/16 00:45	17060-07-0	
Toluene-d8 (S)	77	%	50-150	5		12/13/16 00:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-200-120816 **Lab ID: 92322711023** Collected: 12/08/16 08:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	3120	125		12/13/16 16:40	67-64-1	
Benzene	ND	ug/L	125	125		12/13/16 16:40	71-43-2	
Bromobenzene	ND	ug/L	125	125		12/13/16 16:40	108-86-1	
Bromochloromethane	ND	ug/L	125	125		12/13/16 16:40	74-97-5	
Bromodichloromethane	ND	ug/L	125	125		12/13/16 16:40	75-27-4	
Bromoform	ND	ug/L	125	125		12/13/16 16:40	75-25-2	
Bromomethane	ND	ug/L	250	125		12/13/16 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	625	125		12/13/16 16:40	78-93-3	
Carbon tetrachloride	ND	ug/L	125	125		12/13/16 16:40	56-23-5	
Chlorobenzene	ND	ug/L	125	125		12/13/16 16:40	108-90-7	
Chloroethane	ND	ug/L	125	125		12/13/16 16:40	75-00-3	
Chloroform	ND	ug/L	125	125		12/13/16 16:40	67-66-3	
Chloromethane	ND	ug/L	125	125		12/13/16 16:40	74-87-3	
2-Chlorotoluene	ND	ug/L	125	125		12/13/16 16:40	95-49-8	
4-Chlorotoluene	ND	ug/L	125	125		12/13/16 16:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	250	125		12/13/16 16:40	96-12-8	
Dibromochloromethane	ND	ug/L	125	125		12/13/16 16:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	125	125		12/13/16 16:40	106-93-4	
Dibromomethane	ND	ug/L	125	125		12/13/16 16:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	125	125		12/13/16 16:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	125	125		12/13/16 16:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	125	125		12/13/16 16:40	106-46-7	
Dichlorodifluoromethane	ND	ug/L	125	125		12/13/16 16:40	75-71-8	
1,1-Dichloroethane	**6060**	ug/L	125	125		12/13/16 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	125	125		12/13/16 16:40	107-06-2	
1,1-Dichloroethene	**24500**	ug/L	125	125		12/13/16 16:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	125	125		12/13/16 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	125	125		12/13/16 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	125	125		12/13/16 16:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	125	125		12/13/16 16:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	125	125		12/13/16 16:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	125	125		12/13/16 16:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	125	125		12/13/16 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	125	125		12/13/16 16:40	10061-02-6	
Diisopropyl ether	ND	ug/L	125	125		12/13/16 16:40	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	18800	125		12/13/16 16:40	123-91-1	L3
Ethylbenzene	ND	ug/L	125	125		12/13/16 16:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	125	125		12/13/16 16:40	87-68-3	
2-Hexanone	ND	ug/L	625	125		12/13/16 16:40	591-78-6	
p-Isopropyltoluene	ND	ug/L	125	125		12/13/16 16:40	99-87-6	
Methylene Chloride	ND	ug/L	250	125		12/13/16 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	625	125		12/13/16 16:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	125	125		12/13/16 16:40	1634-04-4	
Naphthalene	ND	ug/L	125	125		12/13/16 16:40	91-20-3	
Styrene	ND	ug/L	125	125		12/13/16 16:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	125	125		12/13/16 16:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	125	125		12/13/16 16:40	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-200-120816 **Lab ID: 92322711023** Collected: 12/08/16 08:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	125	125		12/13/16 16:40	127-18-4	
Toluene	ND	ug/L	125	125		12/13/16 16:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	125	125		12/13/16 16:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	125	125		12/13/16 16:40	120-82-1	
1,1,1-Trichloroethane	**4330**	ug/L	125	125		12/13/16 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	125	125		12/13/16 16:40	79-00-5	
Trichloroethene	ND	ug/L	125	125		12/13/16 16:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	125	125		12/13/16 16:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	125	125		12/13/16 16:40	96-18-4	
Vinyl acetate	ND	ug/L	250	125		12/13/16 16:40	108-05-4	
Vinyl chloride	ND	ug/L	125	125		12/13/16 16:40	75-01-4	
Xylene (Total)	ND	ug/L	125	125		12/13/16 16:40	1330-20-7	
m&p-Xylene	ND	ug/L	250	125		12/13/16 16:40	179601-23-1	
o-Xylene	ND	ug/L	125	125		12/13/16 16:40	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	125		12/13/16 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	125		12/13/16 16:40	17060-07-0	
Toluene-d8 (S)	104	%	70-130	125		12/13/16 16:40	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**1390**	ug/L	40.0	20		12/13/16 14:16	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	81	%	50-150	10		12/13/16 01:03	17060-07-0	
Toluene-d8 (S)	77	%	50-150	10		12/13/16 01:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-03-120816 **Lab ID: 92322711024** Collected: 12/08/16 09:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/13/16 00:32	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 00:32	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 00:32	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 00:32	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 00:32	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 00:32	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 00:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 00:32	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 00:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 00:32	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 00:32	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 00:32	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:32	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:32	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 00:32	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 00:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 00:32	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 00:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 00:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 00:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 00:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:32	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:32	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:32	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 00:32	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 00:32	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 00:32	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 00:32	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 00:32	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 00:32	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 00:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 00:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 00:32	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 00:32	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 00:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:32	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-03-120816 **Lab ID: 92322711024** Collected: 12/08/16 09:30 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 00:32	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 00:32	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:32	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 00:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 00:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 00:32	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 00:32	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 00:32	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 00:32	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 00:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 00:32	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		12/13/16 00:32	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/13/16 00:32	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 00:32	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**4.6**	ug/L	2.0	1		12/13/16 15:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 15:30	17060-07-0	
Toluene-d8 (S)	77	%	50-150	1		12/13/16 15:30	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: TRIP BLANKS **Lab ID: 92322711025** Collected: 12/07/16 00:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		12/12/16 23:40	67-64-1	
Benzene	ND	ug/L	1.0	1		12/12/16 23:40	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/12/16 23:40	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/12/16 23:40	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/16 23:40	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/12/16 23:40	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/12/16 23:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/12/16 23:40	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/16 23:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/16 23:40	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/16 23:40	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/16 23:40	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 23:40	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 23:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/12/16 23:40	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/16 23:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/16 23:40	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/12/16 23:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/12/16 23:40	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/16 23:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/16 23:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 23:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 23:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 23:40	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/12/16 23:40	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/12/16 23:40	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/12/16 23:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/12/16 23:40	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/12/16 23:40	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/12/16 23:40	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/12/16 23:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/12/16 23:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/12/16 23:40	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/12/16 23:40	91-20-3	
Styrene	ND	ug/L	1.0	1		12/12/16 23:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 23:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 23:40	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: TRIP BLANKS **Lab ID: 92322711025** Collected: 12/07/16 00:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		12/12/16 23:40	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/16 23:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 23:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/16 23:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/16 23:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/16 23:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/16 23:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/12/16 23:40	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/12/16 23:40	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/12/16 23:40	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/12/16 23:40	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/12/16 23:40	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/16 23:40	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		12/12/16 23:40	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		12/12/16 23:40	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/12/16 23:40	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		12/12/16 22:34	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	50-150	1		12/12/16 22:34	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/12/16 22:34	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-100-120616 **Lab ID: 92322711026** Collected: 12/06/16 12:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		12/14/16 17:45	67-64-1	
Benzene	ND	ug/L	2.0	2		12/14/16 17:45	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		12/14/16 17:45	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		12/14/16 17:45	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		12/14/16 17:45	75-27-4	
Bromoform	ND	ug/L	2.0	2		12/14/16 17:45	75-25-2	
Bromomethane	ND	ug/L	4.0	2		12/14/16 17:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		12/14/16 17:45	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		12/14/16 17:45	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	108-90-7	
Chloroethane	ND	ug/L	2.0	2		12/14/16 17:45	75-00-3	
Chloroform	ND	ug/L	2.0	2		12/14/16 17:45	67-66-3	
Chloromethane	ND	ug/L	2.0	2		12/14/16 17:45	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		12/14/16 17:45	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		12/14/16 17:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		12/14/16 17:45	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		12/14/16 17:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		12/14/16 17:45	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		12/14/16 17:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		12/14/16 17:45	75-71-8	
1,1-Dichloroethane	**66.5**	ug/L	2.0	2		12/14/16 17:45	75-34-3	
1,2-Dichloroethane	**3.3**	ug/L	2.0	2		12/14/16 17:45	107-06-2	
1,1-Dichloroethene	**278**	ug/L	2.0	2		12/14/16 17:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		12/14/16 17:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		12/14/16 17:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		12/14/16 17:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		12/14/16 17:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		12/14/16 17:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		12/14/16 17:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		12/14/16 17:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		12/14/16 17:45	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		12/14/16 17:45	108-20-3	
1,4-Dioxane (p-Dioxane)	**661**	ug/L	300	2		12/14/16 17:45	123-91-1	L1
Ethylbenzene	ND	ug/L	2.0	2		12/14/16 17:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		12/14/16 17:45	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		12/14/16 17:45	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		12/14/16 17:45	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2		12/14/16 17:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		12/14/16 17:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.0	2		12/14/16 17:45	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		12/14/16 17:45	91-20-3	
Styrene	ND	ug/L	2.0	2		12/14/16 17:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		12/14/16 17:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		12/14/16 17:45	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Sample: MW-100-120616 **Lab ID: 92322711026** Collected: 12/06/16 12:00 Received: 12/09/16 10:07 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		12/14/16 17:45	127-18-4	
Toluene	ND	ug/L	2.0	2		12/14/16 17:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		12/14/16 17:45	120-82-1	
1,1,1-Trichloroethane	**28.6**	ug/L	2.0	2		12/14/16 17:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		12/14/16 17:45	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		12/14/16 17:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		12/14/16 17:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		12/14/16 17:45	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		12/14/16 17:45	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		12/14/16 17:45	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		12/14/16 17:45	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		12/14/16 17:45	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		12/14/16 17:45	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	2		12/14/16 17:45	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	2		12/14/16 17:45	17060-07-0	
Toluene-d8 (S)	107	%	70-130	2		12/14/16 17:45	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**220**	ug/L	5.0	2.5		12/13/16 01:41	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	50-150	2.5		12/13/16 01:41	17060-07-0	
Toluene-d8 (S)	78	%	50-150	2.5		12/13/16 01:41	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340452 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711014

METHOD BLANK: 1888247 Matrix: Water
Associated Lab Samples: 92322711014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,1-Dichloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,1-Dichloroethene	ug/L	ND	1.0	12/12/16 11:28	
1,1-Dichloropropene	ug/L	ND	1.0	12/12/16 11:28	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/12/16 11:28	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/12/16 11:28	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/12/16 11:28	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
1,2-Dichloroethane	ug/L	ND	1.0	12/12/16 11:28	
1,2-Dichloropropane	ug/L	ND	1.0	12/12/16 11:28	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
1,3-Dichloropropane	ug/L	ND	1.0	12/12/16 11:28	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/12/16 11:28	
2,2-Dichloropropane	ug/L	ND	1.0	12/12/16 11:28	
2-Butanone (MEK)	ug/L	ND	5.0	12/12/16 11:28	
2-Chlorotoluene	ug/L	ND	1.0	12/12/16 11:28	
2-Hexanone	ug/L	ND	5.0	12/12/16 11:28	
4-Chlorotoluene	ug/L	ND	1.0	12/12/16 11:28	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/12/16 11:28	
Acetone	ug/L	ND	25.0	12/12/16 11:28	
Benzene	ug/L	ND	1.0	12/12/16 11:28	
Bromobenzene	ug/L	ND	1.0	12/12/16 11:28	
Bromochloromethane	ug/L	ND	1.0	12/12/16 11:28	
Bromodichloromethane	ug/L	ND	1.0	12/12/16 11:28	
Bromoform	ug/L	ND	1.0	12/12/16 11:28	
Bromomethane	ug/L	ND	2.0	12/12/16 11:28	
Carbon tetrachloride	ug/L	ND	1.0	12/12/16 11:28	
Chlorobenzene	ug/L	ND	1.0	12/12/16 11:28	
Chloroethane	ug/L	ND	1.0	12/12/16 11:28	
Chloroform	ug/L	ND	1.0	12/12/16 11:28	
Chloromethane	ug/L	ND	1.0	12/12/16 11:28	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 11:28	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 11:28	
Dibromochloromethane	ug/L	ND	1.0	12/12/16 11:28	
Dibromomethane	ug/L	ND	1.0	12/12/16 11:28	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1888247 Matrix: Water
Associated Lab Samples: 92322711014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/12/16 11:28	
Diisopropyl ether	ug/L	ND	1.0	12/12/16 11:28	
Ethylbenzene	ug/L	ND	1.0	12/12/16 11:28	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/12/16 11:28	
m&p-Xylene	ug/L	ND	2.0	12/12/16 11:28	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/12/16 11:28	
Methylene Chloride	ug/L	ND	2.0	12/12/16 11:28	
Naphthalene	ug/L	ND	1.0	12/12/16 11:28	
o-Xylene	ug/L	ND	1.0	12/12/16 11:28	
p-Isopropyltoluene	ug/L	ND	1.0	12/12/16 11:28	
Styrene	ug/L	ND	1.0	12/12/16 11:28	
Tetrachloroethene	ug/L	ND	1.0	12/12/16 11:28	
Toluene	ug/L	ND	1.0	12/12/16 11:28	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 11:28	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 11:28	
Trichloroethene	ug/L	ND	1.0	12/12/16 11:28	
Trichlorofluoromethane	ug/L	ND	1.0	12/12/16 11:28	
Vinyl acetate	ug/L	ND	2.0	12/12/16 11:28	
Vinyl chloride	ug/L	ND	1.0	12/12/16 11:28	
Xylene (Total)	ug/L	ND	1.0	12/12/16 11:28	
1,2-Dichloroethane-d4 (S)	%	99	70-130	12/12/16 11:28	
4-Bromofluorobenzene (S)	%	102	70-130	12/12/16 11:28	
Toluene-d8 (S)	%	111	70-130	12/12/16 11:28	

LABORATORY CONTROL SAMPLE: 1888248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.4	101	70-130	
1,1,1-Trichloroethane	ug/L	50	56.5	113	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.0	98	70-130	
1,1,2-Trichloroethane	ug/L	50	54.5	109	70-130	
1,1-Dichloroethane	ug/L	50	54.1	108	70-130	
1,1-Dichloroethene	ug/L	50	58.6	117	70-132	
1,1-Dichloropropene	ug/L	50	55.4	111	70-130	
1,2,3-Trichlorobenzene	ug/L	50	50.1	100	70-135	
1,2,3-Trichloropropane	ug/L	50	46.4	93	70-130	
1,2,4-Trichlorobenzene	ug/L	50	52.7	105	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	44.8	90	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	51.3	103	70-130	
1,2-Dichlorobenzene	ug/L	50	52.0	104	70-130	
1,2-Dichloroethane	ug/L	50	50.4	101	70-130	
1,2-Dichloropropane	ug/L	50	55.6	111	70-130	
1,3-Dichlorobenzene	ug/L	50	53.3	107	70-130	
1,3-Dichloropropane	ug/L	50	53.8	108	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1888248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	52.5	105	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1260	126	71-125	L0
2,2-Dichloropropane	ug/L	50	56.3	113	58-145	
2-Butanone (MEK)	ug/L	100	90.8	91	70-145	
2-Chlorotoluene	ug/L	50	54.9	110	70-130	
2-Hexanone	ug/L	100	90.4	90	70-144	
4-Chlorotoluene	ug/L	50	53.4	107	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.0	94	70-140	
Acetone	ug/L	100	80.0	80	50-175	
Benzene	ug/L	50	58.6	117	70-130	
Bromobenzene	ug/L	50	53.0	106	70-130	
Bromochloromethane	ug/L	50	54.6	109	70-130	
Bromodichloromethane	ug/L	50	55.7	111	70-130	
Bromoform	ug/L	50	45.7	91	70-130	
Bromomethane	ug/L	50	46.8	94	54-130	
Carbon tetrachloride	ug/L	50	51.8	104	70-132	
Chlorobenzene	ug/L	50	55.7	111	70-130	
Chloroethane	ug/L	50	58.3	117	64-134	
Chloroform	ug/L	50	53.7	107	70-130	
Chloromethane	ug/L	50	51.9	104	64-130	
cis-1,2-Dichloroethene	ug/L	50	54.2	108	70-131	
cis-1,3-Dichloropropene	ug/L	50	52.7	105	70-130	
Dibromochloromethane	ug/L	50	49.1	98	70-130	
Dibromomethane	ug/L	50	51.2	102	70-131	
Dichlorodifluoromethane	ug/L	50	52.8	106	56-130	
Diisopropyl ether	ug/L	50	52.5	105	70-130	
Ethylbenzene	ug/L	50	55.6	111	70-130	
Hexachloro-1,3-butadiene	ug/L	50	57.0	114	70-130	
m&p-Xylene	ug/L	100	109	109	70-130	
Methyl-tert-butyl ether	ug/L	50	57.8	116	70-130	
Methylene Chloride	ug/L	50	52.4	105	63-130	
Naphthalene	ug/L	50	50.3	101	70-138	
o-Xylene	ug/L	50	53.5	107	70-130	
p-Isopropyltoluene	ug/L	50	52.8	106	70-130	
Styrene	ug/L	50	54.3	109	70-130	
Tetrachloroethene	ug/L	50	50.6	101	70-130	
Toluene	ug/L	50	55.6	111	70-130	
trans-1,2-Dichloroethene	ug/L	50	55.6	111	70-130	
trans-1,3-Dichloropropene	ug/L	50	56.6	113	70-132	
Trichloroethene	ug/L	50	53.5	107	70-130	
Trichlorofluoromethane	ug/L	50	57.6	115	62-133	
Vinyl acetate	ug/L	100	97.7	98	66-157	
Vinyl chloride	ug/L	50	52.0	104	50-150	
Xylene (Total)	ug/L	150	162	108	70-130	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			97	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1888249

Parameter	Units	92322779004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	18.9	95	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	24.2	121	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	19.0	95	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	21.5	108	70-130	
1,1-Dichloroethane	ug/L	ND	20	24.2	121	70-130	
1,1-Dichloroethene	ug/L	ND	20	25.5	128	70-166	
1,1-Dichloropropene	ug/L	ND	20	22.9	115	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	19.3	96	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	18.6	93	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.0	100	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	17.2	86	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	21.8	109	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	21.8	109	70-130	
1,2-Dichloroethane	ug/L	ND	20	21.9	109	70-130	
1,2-Dichloropropane	ug/L	ND	20	22.8	114	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	21.8	109	70-130	
1,3-Dichloropropane	ug/L	ND	20	20.7	103	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	21.4	107	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	224	56	70-130	M0
2,2-Dichloropropane	ug/L	ND	20	22.2	111	70-130	
2-Butanone (MEK)	ug/L	ND	40	40.1	100	70-130	
2-Chlorotoluene	ug/L	ND	20	23.1	116	70-130	
2-Hexanone	ug/L	ND	40	35.8	89	70-130	
4-Chlorotoluene	ug/L	ND	20	22.4	112	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	37.6	94	70-130	
Acetone	ug/L	ND	40	35.8	85	70-130	
Benzene	ug/L	ND	20	25.8	129	70-148	
Bromobenzene	ug/L	ND	20	21.6	108	70-130	
Bromochloromethane	ug/L	ND	20	25.2	126	70-130	
Bromodichloromethane	ug/L	ND	20	23.5	117	70-130	
Bromoform	ug/L	ND	20	16.7	83	70-130	
Bromomethane	ug/L	ND	20	17.7	89	70-130	
Carbon tetrachloride	ug/L	ND	20	22.4	112	70-130	
Chlorobenzene	ug/L	ND	20	22.8	114	70-146	
Chloroethane	ug/L	ND	20	25.2	126	70-130	
Chloroform	ug/L	ND	20	24.0	120	70-130	
Chloromethane	ug/L	ND	20	23.5	118	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	24.0	120	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	19.9	100	70-130	
Dibromochloromethane	ug/L	ND	20	19.2	96	70-130	
Dibromomethane	ug/L	ND	20	21.9	109	70-130	
Dichlorodifluoromethane	ug/L	ND	20	24.6	123	70-130	
Diisopropyl ether	ug/L	ND	20	21.7	109	70-130	
Ethylbenzene	ug/L	ND	20	24.0	120	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.5	107	70-130	
m&p-Xylene	ug/L	ND	40	48.4	121	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	22.7	113	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1888249

Parameter	Units	92322779004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	22.7	114	70-130	
Naphthalene	ug/L	ND	20	18.2	91	70-130	
o-Xylene	ug/L	ND	20	23.4	117	70-130	
p-Isopropyltoluene	ug/L	ND	20	21.6	108	70-130	
Styrene	ug/L	ND	20	23.2	116	70-130	
Tetrachloroethene	ug/L	ND	20	20.4	102	70-130	
Toluene	ug/L	ND	20	24.7	124	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	25.1	126	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	19.6	98	70-130	
Trichloroethene	ug/L	ND	20	23.1	115	69-151	
Trichlorofluoromethane	ug/L	ND	20	28.2	141	70-130	M1
Vinyl acetate	ug/L	ND	40	35.7	89	70-130	
Vinyl chloride	ug/L	ND	20	23.9	119	70-130	
1,2-Dichloroethane-d4 (S)	%				98	70-130	
4-Bromofluorobenzene (S)	%				101	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 1888250

Parameter	Units	92322842001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

SAMPLE DUPLICATE: 1888250

Parameter	Units	92322842001 Result	Dup Result	RPD	Max RPD	Qualifiers
Acetone	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	97	98	0		
4-Bromofluorobenzene (S)	%	99	102	3		
Toluene-d8 (S)	%	108	109	1		

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340465 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711003, 92322711006, 92322711007, 92322711008, 92322711019, 92322711024, 92322711025

METHOD BLANK: 1888305 Matrix: Water
Associated Lab Samples: 92322711003, 92322711006, 92322711007, 92322711008, 92322711019, 92322711024, 92322711025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,1-Dichloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,1-Dichloroethene	ug/L	ND	1.0	12/12/16 23:05	
1,1-Dichloropropene	ug/L	ND	1.0	12/12/16 23:05	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/12/16 23:05	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/12/16 23:05	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/12/16 23:05	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
1,2-Dichloroethane	ug/L	ND	1.0	12/12/16 23:05	
1,2-Dichloropropane	ug/L	ND	1.0	12/12/16 23:05	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
1,3-Dichloropropane	ug/L	ND	1.0	12/12/16 23:05	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/12/16 23:05	
2,2-Dichloropropane	ug/L	ND	1.0	12/12/16 23:05	
2-Butanone (MEK)	ug/L	ND	5.0	12/12/16 23:05	
2-Chlorotoluene	ug/L	ND	1.0	12/12/16 23:05	
2-Hexanone	ug/L	ND	5.0	12/12/16 23:05	
4-Chlorotoluene	ug/L	ND	1.0	12/12/16 23:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/12/16 23:05	
Acetone	ug/L	ND	25.0	12/12/16 23:05	
Benzene	ug/L	ND	1.0	12/12/16 23:05	
Bromobenzene	ug/L	ND	1.0	12/12/16 23:05	
Bromochloromethane	ug/L	ND	1.0	12/12/16 23:05	
Bromodichloromethane	ug/L	ND	1.0	12/12/16 23:05	
Bromoform	ug/L	ND	1.0	12/12/16 23:05	
Bromomethane	ug/L	ND	2.0	12/12/16 23:05	
Carbon tetrachloride	ug/L	ND	1.0	12/12/16 23:05	
Chlorobenzene	ug/L	ND	1.0	12/12/16 23:05	
Chloroethane	ug/L	ND	1.0	12/12/16 23:05	
Chloroform	ug/L	ND	1.0	12/12/16 23:05	
Chloromethane	ug/L	ND	1.0	12/12/16 23:05	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 23:05	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 23:05	
Dibromochloromethane	ug/L	ND	1.0	12/12/16 23:05	
Dibromomethane	ug/L	ND	1.0	12/12/16 23:05	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1888305 Matrix: Water
Associated Lab Samples: 92322711003, 92322711006, 92322711007, 92322711008, 92322711019, 92322711024, 92322711025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/12/16 23:05	
Diisopropyl ether	ug/L	ND	1.0	12/12/16 23:05	
Ethylbenzene	ug/L	ND	1.0	12/12/16 23:05	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/12/16 23:05	
m&p-Xylene	ug/L	ND	2.0	12/12/16 23:05	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/12/16 23:05	
Methylene Chloride	ug/L	ND	2.0	12/12/16 23:05	
Naphthalene	ug/L	ND	1.0	12/12/16 23:05	
o-Xylene	ug/L	ND	1.0	12/12/16 23:05	
p-Isopropyltoluene	ug/L	ND	1.0	12/12/16 23:05	
Styrene	ug/L	ND	1.0	12/12/16 23:05	
Tetrachloroethene	ug/L	ND	1.0	12/12/16 23:05	
Toluene	ug/L	ND	1.0	12/12/16 23:05	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 23:05	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 23:05	
Trichloroethene	ug/L	ND	1.0	12/12/16 23:05	
Trichlorofluoromethane	ug/L	ND	1.0	12/12/16 23:05	
Vinyl acetate	ug/L	ND	2.0	12/12/16 23:05	
Vinyl chloride	ug/L	ND	1.0	12/12/16 23:05	
Xylene (Total)	ug/L	ND	1.0	12/12/16 23:05	
1,2-Dichloroethane-d4 (S)	%	93	70-130	12/12/16 23:05	
4-Bromofluorobenzene (S)	%	100	70-130	12/12/16 23:05	
Toluene-d8 (S)	%	105	70-130	12/12/16 23:05	

LABORATORY CONTROL SAMPLE: 1888306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	46.9	94	70-130	
1,1,1-Trichloroethane	ug/L	50	54.0	108	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.4	95	70-130	
1,1,2-Trichloroethane	ug/L	50	53.6	107	70-130	
1,1-Dichloroethane	ug/L	50	53.1	106	70-130	
1,1-Dichloroethene	ug/L	50	56.0	112	70-132	
1,1-Dichloropropene	ug/L	50	53.2	106	70-130	
1,2,3-Trichlorobenzene	ug/L	50	49.6	99	70-135	
1,2,3-Trichloropropane	ug/L	50	45.0	90	70-130	
1,2,4-Trichlorobenzene	ug/L	50	51.2	102	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	43.2	86	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	51.4	103	70-130	
1,2-Dichlorobenzene	ug/L	50	50.6	101	70-130	
1,2-Dichloroethane	ug/L	50	50.5	101	70-130	
1,2-Dichloropropane	ug/L	50	55.5	111	70-130	
1,3-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,3-Dichloropropane	ug/L	50	52.6	105	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1888306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1360	136	71-125	L0
2,2-Dichloropropane	ug/L	50	52.4	105	58-145	
2-Butanone (MEK)	ug/L	100	94.0	94	70-145	
2-Chlorotoluene	ug/L	50	52.1	104	70-130	
2-Hexanone	ug/L	100	87.1	87	70-144	
4-Chlorotoluene	ug/L	50	51.2	102	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	91.7	92	70-140	
Acetone	ug/L	100	83.4	83	50-175	
Benzene	ug/L	50	56.7	113	70-130	
Bromobenzene	ug/L	50	50.5	101	70-130	
Bromochloromethane	ug/L	50	54.8	110	70-130	
Bromodichloromethane	ug/L	50	56.2	112	70-130	
Bromoform	ug/L	50	42.4	85	70-130	
Bromomethane	ug/L	50	46.4	93	54-130	
Carbon tetrachloride	ug/L	50	48.8	98	70-132	
Chlorobenzene	ug/L	50	53.5	107	70-130	
Chloroethane	ug/L	50	56.8	114	64-134	
Chloroform	ug/L	50	53.1	106	70-130	
Chloromethane	ug/L	50	53.1	106	64-130	
cis-1,2-Dichloroethene	ug/L	50	54.1	108	70-131	
cis-1,3-Dichloropropene	ug/L	50	51.8	104	70-130	
Dibromochloromethane	ug/L	50	46.9	94	70-130	
Dibromomethane	ug/L	50	51.2	102	70-131	
Dichlorodifluoromethane	ug/L	50	50.2	100	56-130	
Diisopropyl ether	ug/L	50	52.5	105	70-130	
Ethylbenzene	ug/L	50	52.1	104	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.5	105	70-130	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	57.1	114	70-130	
Methylene Chloride	ug/L	50	52.7	105	63-130	
Naphthalene	ug/L	50	48.1	96	70-138	
o-Xylene	ug/L	50	51.1	102	70-130	
p-Isopropyltoluene	ug/L	50	48.6	97	70-130	
Styrene	ug/L	50	52.0	104	70-130	
Tetrachloroethene	ug/L	50	47.1	94	70-130	
Toluene	ug/L	50	54.8	110	70-130	
trans-1,2-Dichloroethene	ug/L	50	54.7	109	70-130	
trans-1,3-Dichloropropene	ug/L	50	54.6	109	70-132	
Trichloroethene	ug/L	50	52.0	104	70-130	
Trichlorofluoromethane	ug/L	50	55.3	111	62-133	
Vinyl acetate	ug/L	100	94.3	94	66-157	
Vinyl chloride	ug/L	50	50.0	100	50-150	
Xylene (Total)	ug/L	150	155	103	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			96	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1888880

Parameter	Units	92322711006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	12.7	64	70-130	M1
1,1,1-Trichloroethane	ug/L	ND	20	16.5	82	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	12.2	61	70-130	M1
1,1,2-Trichloroethane	ug/L	ND	20	13.7	68	70-130	M1
1,1-Dichloroethane	ug/L	2.6	20	17.8	76	70-130	
1,1-Dichloroethene	ug/L	23.4	20	38.8	77	70-166	
1,1-Dichloropropene	ug/L	ND	20	14.6	73	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	13.1	65	70-130	M1
1,2,3-Trichloropropane	ug/L	ND	20	12.3	62	70-130	M1
1,2,4-Trichlorobenzene	ug/L	ND	20	13.3	67	70-130	M1
1,2-Dibromo-3-chloropropane	ug/L	ND	20	11.7	59	70-130	M1
1,2-Dibromoethane (EDB)	ug/L	ND	20	13.1	66	70-130	M1
1,2-Dichlorobenzene	ug/L	ND	20	13.9	69	70-130	M1
1,2-Dichloroethane	ug/L	ND	20	14.2	70	70-130	
1,2-Dichloropropane	ug/L	ND	20	14.4	72	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	13.7	68	70-130	M1
1,3-Dichloropropane	ug/L	ND	20	12.8	64	70-130	M1
1,4-Dichlorobenzene	ug/L	ND	20	13.8	69	70-130	M1
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	799	200	70-130	M0
2,2-Dichloropropane	ug/L	ND	20	16.2	81	70-130	
2-Butanone (MEK)	ug/L	ND	40	27.5	69	70-130	M1
2-Chlorotoluene	ug/L	ND	20	14.8	74	70-130	
2-Hexanone	ug/L	ND	40	25.8	65	70-130	M1
4-Chlorotoluene	ug/L	ND	20	14.2	71	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	25.3	63	70-130	M1
Acetone	ug/L	ND	40	25.2	63	70-130	M1
Benzene	ug/L	ND	20	16.0	80	70-148	
Bromobenzene	ug/L	ND	20	13.7	69	70-130	M1
Bromochloromethane	ug/L	ND	20	15.0	75	70-130	
Bromodichloromethane	ug/L	ND	20	15.0	75	70-130	
Bromoform	ug/L	ND	20	11.9	59	70-130	M1
Bromomethane	ug/L	ND	20	16.9	84	70-130	
Carbon tetrachloride	ug/L	ND	20	15.5	77	70-130	
Chlorobenzene	ug/L	ND	20	14.8	74	70-146	
Chloroethane	ug/L	ND	20	16.4	82	70-130	
Chloroform	ug/L	ND	20	14.7	74	70-130	
Chloromethane	ug/L	ND	20	16.2	81	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	15.3	77	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	12.8	64	70-130	M1
Dibromochloromethane	ug/L	ND	20	12.8	64	70-130	M1
Dibromomethane	ug/L	ND	20	14.3	72	70-130	
Dichlorodifluoromethane	ug/L	ND	20	15.7	78	70-130	
Diisopropyl ether	ug/L	ND	20	13.7	69	70-130	M1
Ethylbenzene	ug/L	ND	20	15.2	76	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	15.4	77	70-130	
m&p-Xylene	ug/L	ND	40	30.8	77	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	14.4	72	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1888880

Parameter	Units	92322711006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	13.8	69	70-130	M1
Naphthalene	ug/L	ND	20	12.5	62	70-130	M1
o-Xylene	ug/L	ND	20	14.8	74	70-130	
p-Isopropyltoluene	ug/L	ND	20	13.6	68	70-130	M1
Styrene	ug/L	ND	20	14.3	71	70-130	
Tetrachloroethene	ug/L	ND	20	14.1	71	70-130	
Toluene	ug/L	ND	20	16.0	80	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	15.2	76	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	13.0	65	70-130	M1
Trichloroethene	ug/L	ND	20	14.6	73	69-151	
Trichlorofluoromethane	ug/L	ND	20	19.0	95	70-130	
Vinyl acetate	ug/L	ND	40	25.9	65	70-130	M1
Vinyl chloride	ug/L	ND	20	15.6	78	70-130	
1,2-Dichloroethane-d4 (S)	%				95	70-130	
4-Bromofluorobenzene (S)	%				100	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 1888879

Parameter	Units	92322711003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

SAMPLE DUPLICATE: 1888879

Parameter	Units	92322711003 Result	Dup Result	RPD	Max RPD	Qualifiers
Acetone	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	.38J		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	96	95	0		
4-Bromofluorobenzene (S)	%	103	102	1		
Toluene-d8 (S)	%	108	109	1		

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340466 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711001, 92322711002, 92322711004, 92322711005, 92322711018, 92322711021

METHOD BLANK: 1888321 Matrix: Water
Associated Lab Samples: 92322711001, 92322711002, 92322711004, 92322711005, 92322711018, 92322711021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,1-Dichloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,1-Dichloroethene	ug/L	ND	1.0	12/12/16 23:22	
1,1-Dichloropropene	ug/L	ND	1.0	12/12/16 23:22	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/12/16 23:22	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/12/16 23:22	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/12/16 23:22	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
1,2-Dichloroethane	ug/L	ND	1.0	12/12/16 23:22	
1,2-Dichloropropane	ug/L	ND	1.0	12/12/16 23:22	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
1,3-Dichloropropane	ug/L	ND	1.0	12/12/16 23:22	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/12/16 23:22	
2,2-Dichloropropane	ug/L	ND	1.0	12/12/16 23:22	
2-Butanone (MEK)	ug/L	ND	5.0	12/12/16 23:22	
2-Chlorotoluene	ug/L	ND	1.0	12/12/16 23:22	
2-Hexanone	ug/L	ND	5.0	12/12/16 23:22	
4-Chlorotoluene	ug/L	ND	1.0	12/12/16 23:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/12/16 23:22	
Acetone	ug/L	ND	25.0	12/12/16 23:22	
Benzene	ug/L	ND	1.0	12/12/16 23:22	
Bromobenzene	ug/L	ND	1.0	12/12/16 23:22	
Bromochloromethane	ug/L	ND	1.0	12/12/16 23:22	
Bromodichloromethane	ug/L	ND	1.0	12/12/16 23:22	
Bromoform	ug/L	ND	1.0	12/12/16 23:22	
Bromomethane	ug/L	ND	2.0	12/12/16 23:22	
Carbon tetrachloride	ug/L	ND	1.0	12/12/16 23:22	
Chlorobenzene	ug/L	ND	1.0	12/12/16 23:22	
Chloroethane	ug/L	ND	1.0	12/12/16 23:22	
Chloroform	ug/L	ND	1.0	12/12/16 23:22	
Chloromethane	ug/L	ND	1.0	12/12/16 23:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 23:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 23:22	
Dibromochloromethane	ug/L	ND	1.0	12/12/16 23:22	
Dibromomethane	ug/L	ND	1.0	12/12/16 23:22	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1888321 Matrix: Water
Associated Lab Samples: 92322711001, 92322711002, 92322711004, 92322711005, 92322711018, 92322711021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/12/16 23:22	
Diisopropyl ether	ug/L	ND	1.0	12/12/16 23:22	
Ethylbenzene	ug/L	ND	1.0	12/12/16 23:22	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/12/16 23:22	
m&p-Xylene	ug/L	ND	2.0	12/12/16 23:22	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/12/16 23:22	
Methylene Chloride	ug/L	ND	2.0	12/12/16 23:22	
Naphthalene	ug/L	ND	1.0	12/12/16 23:22	
o-Xylene	ug/L	ND	1.0	12/12/16 23:22	
p-Isopropyltoluene	ug/L	ND	1.0	12/12/16 23:22	
Styrene	ug/L	ND	1.0	12/12/16 23:22	
Tetrachloroethene	ug/L	ND	1.0	12/12/16 23:22	
Toluene	ug/L	ND	1.0	12/12/16 23:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/12/16 23:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/12/16 23:22	
Trichloroethene	ug/L	ND	1.0	12/12/16 23:22	
Trichlorofluoromethane	ug/L	ND	1.0	12/12/16 23:22	
Vinyl acetate	ug/L	ND	2.0	12/12/16 23:22	
Vinyl chloride	ug/L	ND	1.0	12/12/16 23:22	
Xylene (Total)	ug/L	ND	1.0	12/12/16 23:22	
1,2-Dichloroethane-d4 (S)	%	93	70-130	12/12/16 23:22	
4-Bromofluorobenzene (S)	%	101	70-130	12/12/16 23:22	
Toluene-d8 (S)	%	105	70-130	12/12/16 23:22	

LABORATORY CONTROL SAMPLE: 1888322

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.1	96	70-130	
1,1,1-Trichloroethane	ug/L	50	50.6	101	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.4	95	70-130	
1,1,2-Trichloroethane	ug/L	50	54.2	108	70-130	
1,1-Dichloroethane	ug/L	50	50.6	101	70-130	
1,1-Dichloroethene	ug/L	50	51.5	103	70-132	
1,1-Dichloropropene	ug/L	50	49.6	99	70-130	
1,2,3-Trichlorobenzene	ug/L	50	49.2	98	70-135	
1,2,3-Trichloropropane	ug/L	50	45.4	91	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.1	100	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	42.9	86	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	50.8	102	70-130	
1,2-Dichlorobenzene	ug/L	50	50.0	100	70-130	
1,2-Dichloroethane	ug/L	50	49.2	98	70-130	
1,2-Dichloropropane	ug/L	50	54.6	109	70-130	
1,3-Dichlorobenzene	ug/L	50	50.3	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1888322

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	49.5	99	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1470	147	71-125	L0
2,2-Dichloropropane	ug/L	50	48.6	97	58-145	
2-Butanone (MEK)	ug/L	100	95.1	95	70-145	
2-Chlorotoluene	ug/L	50	51.9	104	70-130	
2-Hexanone	ug/L	100	92.4	92	70-144	
4-Chlorotoluene	ug/L	50	50.8	102	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.1	96	70-140	
Acetone	ug/L	100	87.8	88	50-175	
Benzene	ug/L	50	55.6	111	70-130	
Bromobenzene	ug/L	50	48.2	96	70-130	
Bromochloromethane	ug/L	50	54.1	108	70-130	
Bromodichloromethane	ug/L	50	55.3	111	70-130	
Bromoform	ug/L	50	42.9	86	70-130	
Bromomethane	ug/L	50	46.5	93	54-130	
Carbon tetrachloride	ug/L	50	46.3	93	70-132	
Chlorobenzene	ug/L	50	53.1	106	70-130	
Chloroethane	ug/L	50	51.8	104	64-134	
Chloroform	ug/L	50	51.1	102	70-130	
Chloromethane	ug/L	50	49.7	99	64-130	
cis-1,2-Dichloroethene	ug/L	50	51.0	102	70-131	
cis-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Dibromochloromethane	ug/L	50	46.6	93	70-130	
Dibromomethane	ug/L	50	50.5	101	70-131	
Dichlorodifluoromethane	ug/L	50	45.8	92	56-130	
Diisopropyl ether	ug/L	50	51.5	103	70-130	
Ethylbenzene	ug/L	50	52.0	104	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.4	103	70-130	
m&p-Xylene	ug/L	100	102	102	70-130	
Methyl-tert-butyl ether	ug/L	50	56.1	112	70-130	
Methylene Chloride	ug/L	50	50.7	101	63-130	
Naphthalene	ug/L	50	48.7	97	70-138	
o-Xylene	ug/L	50	50.9	102	70-130	
p-Isopropyltoluene	ug/L	50	47.2	94	70-130	
Styrene	ug/L	50	51.8	104	70-130	
Tetrachloroethene	ug/L	50	46.9	94	70-130	
Toluene	ug/L	50	53.6	107	70-130	
trans-1,2-Dichloroethene	ug/L	50	51.4	103	70-130	
trans-1,3-Dichloropropene	ug/L	50	54.2	108	70-132	
Trichloroethene	ug/L	50	50.0	100	70-130	
Trichlorofluoromethane	ug/L	50	51.1	102	62-133	
Vinyl acetate	ug/L	100	93.3	93	66-157	
Vinyl chloride	ug/L	50	45.6	91	50-150	
Xylene (Total)	ug/L	150	153	102	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			98	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888323 1888324

Parameter	Units	92322858003 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	18.8	20.4	94	102	70-130	8	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	24.9	25.8	124	129	70-130	4	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.6	20.1	93	100	70-130	8	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	21.4	23.0	107	115	70-130	7	30	
1,1-Dichloroethane	ug/L	ND	20	20	24.7	25.0	124	125	70-130	1	30	
1,1-Dichloroethene	ug/L	ND	20	20	26.9	27.9	134	139	70-166	4	30	
1,1-Dichloropropene	ug/L	ND	20	20	23.1	23.5	115	117	70-130	2	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	17.7	19.3	89	96	70-130	9	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	18.3	20.0	92	100	70-130	9	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	18.1	19.6	91	98	70-130	8	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	16.3	18.2	82	91	70-130	11	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	21.1	21.5	106	108	70-130	2	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.4	22.0	102	110	70-130	8	30	
1,2-Dichloroethane	ug/L	ND	20	20	22.1	23.1	110	115	70-130	5	30	
1,2-Dichloropropane	ug/L	ND	20	20	22.5	24.2	112	121	70-130	8	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.7	22.0	104	110	70-130	6	30	
1,3-Dichloropropane	ug/L	ND	20	20	20.4	20.7	102	104	70-130	2	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.3	21.7	102	109	70-130	7	30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	400	404	633	101	158	70-130	44	30	M0,R1
2,2-Dichloropropane	ug/L	ND	20	20	18.5	19.9	93	100	70-130	7	30	
2-Butanone (MEK)	ug/L	ND	40	40	43.4	46.2	109	116	70-130	6	30	
2-Chlorotoluene	ug/L	ND	20	20	22.0	23.8	110	119	70-130	8	30	
2-Hexanone	ug/L	ND	40	40	37.0	40.7	92	102	70-130	10	30	
4-Chlorotoluene	ug/L	ND	20	20	21.1	22.6	105	113	70-130	7	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	38.5	42.1	96	105	70-130	9	30	
Acetone	ug/L	ND	40	40	41.6	43.5	104	109	70-130	4	30	
Benzene	ug/L	4.3	20	20	30.7	31.9	132	138	70-148	4	30	
Bromobenzene	ug/L	ND	20	20	20.1	21.1	100	106	70-130	5	30	
Bromochloromethane	ug/L	ND	20	20	25.2	25.7	126	128	70-130	2	30	
Bromodichloromethane	ug/L	ND	20	20	23.6	24.7	118	124	70-130	5	30	
Bromoform	ug/L	ND	20	20	16.4	17.5	82	88	70-130	7	30	
Bromomethane	ug/L	ND	20	20	20.7	23.7	104	119	70-130	13	30	
Carbon tetrachloride	ug/L	ND	20	20	22.5	25.0	112	125	70-130	11	30	
Chlorobenzene	ug/L	ND	20	20	22.7	23.9	113	119	70-146	5	30	
Chloroethane	ug/L	ND	20	20	25.9	26.8	130	134	70-130	4	30	M1
Chloroform	ug/L	ND	20	20	23.7	25.3	118	126	70-130	7	30	
Chloromethane	ug/L	ND	20	20	26.8	27.4	134	137	70-130	2	30	M1
cis-1,2-Dichloroethene	ug/L	ND	20	20	24.5	25.1	122	126	70-130	3	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.5	20.1	92	101	70-130	8	30	
Dibromochloromethane	ug/L	ND	20	20	19.1	19.5	95	98	70-130	2	30	
Dibromomethane	ug/L	ND	20	20	22.2	23.3	111	117	70-130	5	30	
Dichlorodifluoromethane	ug/L	ND	20	20	25.0	25.4	125	127	70-130	2	30	
Diisopropyl ether	ug/L	ND	20	20	21.3	22.5	107	112	70-130	5	30	
Ethylbenzene	ug/L	ND	20	20	23.8	25.0	119	125	70-130	5	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888323 1888324

Parameter	Units	92322858003 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	17.4	19.9	87	99	70-130	13	30	
m&p-Xylene	ug/L	ND	40	40	48.3	49.7	121	124	70-130	3	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	21.8	22.7	109	113	70-130	4	30	
Methylene Chloride	ug/L	ND	20	20	23.2	24.1	116	121	70-130	4	30	
Naphthalene	ug/L	ND	20	20	16.7	18.3	83	92	70-130	9	30	
o-Xylene	ug/L	ND	20	20	23.2	24.0	116	120	70-130	3	30	
p-Isopropyltoluene	ug/L	ND	20	20	19.4	21.9	97	109	70-130	12	30	
Styrene	ug/L	ND	20	20	22.7	23.5	113	117	70-130	3	30	
Tetrachloroethene	ug/L	ND	20	20	20.6	20.9	103	105	70-130	2	30	
Toluene	ug/L	ND	20	20	24.0	26.0	120	130	70-155	8	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	25.6	26.6	128	133	70-130	4	30	M1
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.6	20.6	93	103	70-130	10	30	
Trichloroethene	ug/L	ND	20	20	22.5	24.3	113	121	69-151	7	30	
Trichlorofluoromethane	ug/L	ND	20	20	29.0	30.0	145	150	70-130	3	30	M1
Vinyl acetate	ug/L	ND	40	40	26.5	28.2	66	71	70-130	6	30	M1
Vinyl chloride	ug/L	ND	20	20	24.9	25.7	125	128	70-130	3	30	
1,2-Dichloroethane-d4 (S)	%						100	96	70-130			
4-Bromofluorobenzene (S)	%						105	100	70-130			
Toluene-d8 (S)	%						99	100	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340602 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711009, 92322711010, 92322711011, 92322711013, 92322711020, 92322711022, 92322711023

METHOD BLANK: 1888927 Matrix: Water
Associated Lab Samples: 92322711009, 92322711010, 92322711011, 92322711013, 92322711020, 92322711022, 92322711023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,1-Dichloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,1-Dichloroethene	ug/L	ND	1.0	12/13/16 12:54	
1,1-Dichloropropene	ug/L	ND	1.0	12/13/16 12:54	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/13/16 12:54	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/13/16 12:54	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/13/16 12:54	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
1,2-Dichloroethane	ug/L	ND	1.0	12/13/16 12:54	
1,2-Dichloropropane	ug/L	ND	1.0	12/13/16 12:54	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
1,3-Dichloropropane	ug/L	ND	1.0	12/13/16 12:54	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/13/16 12:54	
2,2-Dichloropropane	ug/L	ND	1.0	12/13/16 12:54	
2-Butanone (MEK)	ug/L	ND	5.0	12/13/16 12:54	
2-Chlorotoluene	ug/L	ND	1.0	12/13/16 12:54	
2-Hexanone	ug/L	ND	5.0	12/13/16 12:54	
4-Chlorotoluene	ug/L	ND	1.0	12/13/16 12:54	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/13/16 12:54	
Acetone	ug/L	ND	25.0	12/13/16 12:54	
Benzene	ug/L	ND	1.0	12/13/16 12:54	
Bromobenzene	ug/L	ND	1.0	12/13/16 12:54	
Bromochloromethane	ug/L	ND	1.0	12/13/16 12:54	
Bromodichloromethane	ug/L	ND	1.0	12/13/16 12:54	
Bromoform	ug/L	ND	1.0	12/13/16 12:54	
Bromomethane	ug/L	ND	2.0	12/13/16 12:54	
Carbon tetrachloride	ug/L	ND	1.0	12/13/16 12:54	
Chlorobenzene	ug/L	ND	1.0	12/13/16 12:54	
Chloroethane	ug/L	ND	1.0	12/13/16 12:54	
Chloroform	ug/L	ND	1.0	12/13/16 12:54	
Chloromethane	ug/L	ND	1.0	12/13/16 12:54	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/13/16 12:54	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/13/16 12:54	
Dibromochloromethane	ug/L	ND	1.0	12/13/16 12:54	
Dibromomethane	ug/L	ND	1.0	12/13/16 12:54	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1888927 Matrix: Water
Associated Lab Samples: 92322711009, 92322711010, 92322711011, 92322711013, 92322711020, 92322711022, 92322711023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/13/16 12:54	
Diisopropyl ether	ug/L	ND	1.0	12/13/16 12:54	
Ethylbenzene	ug/L	ND	1.0	12/13/16 12:54	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/13/16 12:54	
m&p-Xylene	ug/L	ND	2.0	12/13/16 12:54	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/13/16 12:54	
Methylene Chloride	ug/L	ND	2.0	12/13/16 12:54	
Naphthalene	ug/L	ND	1.0	12/13/16 12:54	
o-Xylene	ug/L	ND	1.0	12/13/16 12:54	
p-Isopropyltoluene	ug/L	ND	1.0	12/13/16 12:54	
Styrene	ug/L	ND	1.0	12/13/16 12:54	
Tetrachloroethene	ug/L	ND	1.0	12/13/16 12:54	
Toluene	ug/L	ND	1.0	12/13/16 12:54	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/13/16 12:54	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/13/16 12:54	
Trichloroethene	ug/L	ND	1.0	12/13/16 12:54	
Trichlorofluoromethane	ug/L	ND	1.0	12/13/16 12:54	
Vinyl acetate	ug/L	ND	2.0	12/13/16 12:54	
Vinyl chloride	ug/L	ND	1.0	12/13/16 12:54	
Xylene (Total)	ug/L	ND	1.0	12/13/16 12:54	
1,2-Dichloroethane-d4 (S)	%	96	70-130	12/13/16 12:54	
4-Bromofluorobenzene (S)	%	103	70-130	12/13/16 12:54	
Toluene-d8 (S)	%	106	70-130	12/13/16 12:54	

LABORATORY CONTROL SAMPLE: 1888928

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.5	97	70-130	
1,1,1-Trichloroethane	ug/L	50	58.1	116	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	48.4	97	70-130	
1,1,2-Trichloroethane	ug/L	50	54.0	108	70-130	
1,1-Dichloroethane	ug/L	50	55.6	111	70-130	
1,1-Dichloroethene	ug/L	50	61.2	122	70-132	
1,1-Dichloropropene	ug/L	50	56.3	113	70-130	
1,2,3-Trichlorobenzene	ug/L	50	47.1	94	70-135	
1,2,3-Trichloropropane	ug/L	50	46.4	93	70-130	
1,2,4-Trichlorobenzene	ug/L	50	49.2	98	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	42.7	85	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	52.2	104	70-130	
1,2-Dichlorobenzene	ug/L	50	49.5	99	70-130	
1,2-Dichloroethane	ug/L	50	51.9	104	70-130	
1,2-Dichloropropane	ug/L	50	56.5	113	70-130	
1,3-Dichlorobenzene	ug/L	50	50.4	101	70-130	
1,3-Dichloropropane	ug/L	50	53.6	107	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1888928

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1510	151	71-125	L0
2,2-Dichloropropane	ug/L	50	58.1	116	58-145	
2-Butanone (MEK)	ug/L	100	107	107	70-145	
2-Chlorotoluene	ug/L	50	51.9	104	70-130	
2-Hexanone	ug/L	100	96.1	96	70-144	
4-Chlorotoluene	ug/L	50	51.0	102	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.4	94	70-140	
Acetone	ug/L	100	97.2	97	50-175	
Benzene	ug/L	50	58.5	117	70-130	
Bromobenzene	ug/L	50	47.8	96	70-130	
Bromochloromethane	ug/L	50	57.5	115	70-130	
Bromodichloromethane	ug/L	50	56.0	112	70-130	
Bromoform	ug/L	50	43.6	87	70-130	
Bromomethane	ug/L	50	54.4	109	54-130	
Carbon tetrachloride	ug/L	50	52.3	105	70-132	
Chlorobenzene	ug/L	50	54.3	109	70-130	
Chloroethane	ug/L	50	58.8	118	64-134	
Chloroform	ug/L	50	55.5	111	70-130	
Chloromethane	ug/L	50	57.7	115	64-130	
cis-1,2-Dichloroethene	ug/L	50	56.3	113	70-131	
cis-1,3-Dichloropropene	ug/L	50	52.7	105	70-130	
Dibromochloromethane	ug/L	50	49.0	98	70-130	
Dibromomethane	ug/L	50	52.1	104	70-131	
Dichlorodifluoromethane	ug/L	50	52.4	105	56-130	
Diisopropyl ether	ug/L	50	54.2	108	70-130	
Ethylbenzene	ug/L	50	54.5	109	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.6	105	70-130	
m&p-Xylene	ug/L	100	111	111	70-130	
Methyl-tert-butyl ether	ug/L	50	58.2	116	70-130	
Methylene Chloride	ug/L	50	55.1	110	63-130	
Naphthalene	ug/L	50	46.0	92	70-138	
o-Xylene	ug/L	50	54.3	109	70-130	
p-Isopropyltoluene	ug/L	50	48.2	96	70-130	
Styrene	ug/L	50	55.8	112	70-130	
Tetrachloroethene	ug/L	50	49.7	99	70-130	
Toluene	ug/L	50	54.2	108	70-130	
trans-1,2-Dichloroethene	ug/L	50	59.0	118	70-130	
trans-1,3-Dichloropropene	ug/L	50	55.6	111	70-132	
Trichloroethene	ug/L	50	53.6	107	70-130	
Trichlorofluoromethane	ug/L	50	59.7	119	62-133	
Vinyl acetate	ug/L	100	101	101	66-157	
Vinyl chloride	ug/L	50	53.1	106	50-150	
Xylene (Total)	ug/L	150	165	110	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			104	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888929 1888930

Parameter	Units	92322711011 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	40	40	25.8	27.3	65	68	70-130	5	30	M1
1,1,1-Trichloroethane	ug/L	20.7	40	40	53.3	54.4	81	84	70-130	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	40	40	24.6	26.4	62	66	70-130	7	30	M1
1,1,2-Trichloroethane	ug/L	ND	40	40	29.0	31.1	73	78	70-130	7	30	
1,1-Dichloroethane	ug/L	56.6	40	40	82.0	84.1	64	69	70-130	3	30	M1
1,1-Dichloroethene	ug/L	254	40	40	248	257	-16	6	70-166	4	30	M1
1,1-Dichloropropene	ug/L	ND	40	40	30.8	31.2	77	78	70-130	1	30	
1,2,3-Trichlorobenzene	ug/L	ND	40	40	25.1	25.4	63	64	70-130	1	30	M1
1,2,3-Trichloropropane	ug/L	ND	40	40	24.5	25.2	61	63	70-130	3	30	M1
1,2,4-Trichlorobenzene	ug/L	ND	40	40	26.2	26.0	65	65	70-130	1	30	M1
1,2-Dibromo-3-chloropropane	ug/L	ND	40	40	23.0	23.5	57	59	70-130	2	30	M1
1,2-Dibromoethane (EDB)	ug/L	ND	40	40	26.9	27.8	67	69	70-130	3	30	M1
1,2-Dichlorobenzene	ug/L	ND	40	40	27.4	27.7	69	69	70-130	1	30	M1
1,2-Dichloroethane	ug/L	2.9	40	40	30.9	31.4	70	71	70-130	2	30	
1,2-Dichloropropane	ug/L	ND	40	40	30.6	31.6	77	79	70-130	3	30	
1,3-Dichlorobenzene	ug/L	ND	40	40	27.7	28.7	69	72	70-130	3	30	M1
1,3-Dichloropropane	ug/L	ND	40	40	27.3	28.8	68	72	70-130	5	30	M1
1,4-Dichlorobenzene	ug/L	ND	40	40	27.5	28.0	69	70	70-130	2	30	M1
1,4-Dioxane (p-Dioxane)	ug/L	ND	800	800	1150	1360	144	170	70-130	17	30	M0
2,2-Dichloropropane	ug/L	ND	40	40	27.5	27.7	69	69	70-130	1	30	M1
2-Butanone (MEK)	ug/L	ND	80	80	58.1	60.8	73	76	70-130	4	30	
2-Chlorotoluene	ug/L	ND	40	40	30.2	30.3	75	76	70-130	0	30	
2-Hexanone	ug/L	ND	80	80	50.6	52.5	63	66	70-130	4	30	M1
4-Chlorotoluene	ug/L	ND	40	40	28.9	29.1	72	73	70-130	1	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	80	80	52.9	55.0	66	69	70-130	4	30	M1
Acetone	ug/L	ND	80	80	59.0	60.3	74	75	70-130	2	30	
Benzene	ug/L	ND	40	40	32.4	34.3	81	86	70-148	6	30	
Bromobenzene	ug/L	ND	40	40	26.6	26.9	66	67	70-130	1	30	M1
Bromochloromethane	ug/L	ND	40	40	32.5	33.2	81	83	70-130	2	30	
Bromodichloromethane	ug/L	ND	40	40	29.9	31.6	75	79	70-130	6	30	
Bromoform	ug/L	ND	40	40	24.1	25.3	60	63	70-130	5	30	M1
Bromomethane	ug/L	ND	40	40	30.1	30.6	75	76	70-130	2	30	
Carbon tetrachloride	ug/L	ND	40	40	29.5	31.4	74	78	70-130	6	30	
Chlorobenzene	ug/L	ND	40	40	30.3	31.2	76	78	70-146	3	30	
Chloroethane	ug/L	ND	40	40	33.5	34.4	84	86	70-130	3	30	
Chloroform	ug/L	ND	40	40	29.7	31.9	74	80	70-130	7	30	
Chloromethane	ug/L	ND	40	40	35.8	36.7	89	92	70-130	2	30	
cis-1,2-Dichloroethene	ug/L	ND	40	40	31.4	32.1	78	80	70-130	2	30	
cis-1,3-Dichloropropene	ug/L	ND	40	40	25.4	26.8	63	67	70-130	5	30	M1
Dibromochloromethane	ug/L	ND	40	40	25.1	26.5	63	66	70-130	5	30	M1
Dibromomethane	ug/L	ND	40	40	28.1	31.4	70	78	70-130	11	30	
Dichlorodifluoromethane	ug/L	ND	40	40	32.7	33.7	82	84	70-130	3	30	
Diisopropyl ether	ug/L	ND	40	40	28.4	28.6	71	72	70-130	1	30	
Ethylbenzene	ug/L	ND	40	40	31.4	31.9	78	80	70-130	2	30	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888929 1888930

Parameter	Units	92322711011 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	40	40	27.6	29.6	69	74	70-130	7	30	M1
m&p-Xylene	ug/L	ND	80	80	62.6	65.4	78	82	70-130	4	30	
Methyl-tert-butyl ether	ug/L	ND	40	40	30.2	29.7	74	73	70-130	2	30	
Methylene Chloride	ug/L	ND	40	40	32.6	33.1	79	81	70-130	2	30	
Naphthalene	ug/L	ND	40	40	24.3	24.8	61	62	70-130	2	30	M1
o-Xylene	ug/L	ND	40	40	30.2	31.6	75	79	70-130	5	30	
p-Isopropyltoluene	ug/L	ND	40	40	26.0	26.5	65	66	70-130	2	30	M1
Styrene	ug/L	ND	40	40	29.1	29.8	73	75	70-130	2	30	
Tetrachloroethene	ug/L	ND	40	40	29.0	28.5	72	71	70-130	2	30	
Toluene	ug/L	ND	40	40	31.7	33.1	79	83	70-155	4	30	
trans-1,2-Dichloroethene	ug/L	ND	40	40	32.6	33.9	81	85	70-130	4	30	
trans-1,3-Dichloropropene	ug/L	ND	40	40	25.9	27.1	65	68	70-130	4	30	M1
Trichloroethene	ug/L	ND	40	40	31.2	31.9	78	80	69-151	2	30	
Trichlorofluoromethane	ug/L	ND	40	40	37.4	38.8	94	97	70-130	3	30	
Vinyl acetate	ug/L	ND	80	80	45.6	47.4	57	59	70-130	4	30	M1
Vinyl chloride	ug/L	ND	40	40	30.5	30.5	76	76	70-130	0	30	
1,2-Dichloroethane-d4 (S)	%						96	98	70-130			
4-Bromofluorobenzene (S)	%						104	104	70-130			
Toluene-d8 (S)	%						100	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340638 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711012, 92322711015, 92322711016

METHOD BLANK: 1889287 Matrix: Water
Associated Lab Samples: 92322711012, 92322711015, 92322711016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,1-Dichloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,1-Dichloroethene	ug/L	ND	1.0	12/14/16 01:05	
1,1-Dichloropropene	ug/L	ND	1.0	12/14/16 01:05	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/14/16 01:05	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/14/16 01:05	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/14/16 01:05	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
1,2-Dichloroethane	ug/L	ND	1.0	12/14/16 01:05	
1,2-Dichloropropane	ug/L	ND	1.0	12/14/16 01:05	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
1,3-Dichloropropane	ug/L	ND	1.0	12/14/16 01:05	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/14/16 01:05	
2,2-Dichloropropane	ug/L	ND	1.0	12/14/16 01:05	
2-Butanone (MEK)	ug/L	ND	5.0	12/14/16 01:05	
2-Chlorotoluene	ug/L	ND	1.0	12/14/16 01:05	
2-Hexanone	ug/L	ND	5.0	12/14/16 01:05	
4-Chlorotoluene	ug/L	ND	1.0	12/14/16 01:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/14/16 01:05	
Acetone	ug/L	ND	25.0	12/14/16 01:05	
Benzene	ug/L	ND	1.0	12/14/16 01:05	
Bromobenzene	ug/L	ND	1.0	12/14/16 01:05	
Bromochloromethane	ug/L	ND	1.0	12/14/16 01:05	
Bromodichloromethane	ug/L	ND	1.0	12/14/16 01:05	
Bromoform	ug/L	ND	1.0	12/14/16 01:05	
Bromomethane	ug/L	ND	2.0	12/14/16 01:05	
Carbon tetrachloride	ug/L	ND	1.0	12/14/16 01:05	
Chlorobenzene	ug/L	ND	1.0	12/14/16 01:05	
Chloroethane	ug/L	ND	1.0	12/14/16 01:05	
Chloroform	ug/L	ND	1.0	12/14/16 01:05	
Chloromethane	ug/L	ND	1.0	12/14/16 01:05	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/14/16 01:05	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/14/16 01:05	
Dibromochloromethane	ug/L	ND	1.0	12/14/16 01:05	
Dibromomethane	ug/L	ND	1.0	12/14/16 01:05	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1889287 Matrix: Water
Associated Lab Samples: 92322711012, 92322711015, 92322711016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/14/16 01:05	
Diisopropyl ether	ug/L	ND	1.0	12/14/16 01:05	
Ethylbenzene	ug/L	ND	1.0	12/14/16 01:05	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/14/16 01:05	
m&p-Xylene	ug/L	ND	2.0	12/14/16 01:05	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/14/16 01:05	
Methylene Chloride	ug/L	ND	2.0	12/14/16 01:05	
Naphthalene	ug/L	ND	1.0	12/14/16 01:05	
o-Xylene	ug/L	ND	1.0	12/14/16 01:05	
p-Isopropyltoluene	ug/L	ND	1.0	12/14/16 01:05	
Styrene	ug/L	ND	1.0	12/14/16 01:05	
Tetrachloroethene	ug/L	ND	1.0	12/14/16 01:05	
Toluene	ug/L	ND	1.0	12/14/16 01:05	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/14/16 01:05	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/14/16 01:05	
Trichloroethene	ug/L	ND	1.0	12/14/16 01:05	
Trichlorofluoromethane	ug/L	ND	1.0	12/14/16 01:05	
Vinyl acetate	ug/L	ND	2.0	12/14/16 01:05	
Vinyl chloride	ug/L	ND	1.0	12/14/16 01:05	
Xylene (Total)	ug/L	ND	1.0	12/14/16 01:05	
1,2-Dichloroethane-d4 (S)	%	94	70-130	12/14/16 01:05	
4-Bromofluorobenzene (S)	%	102	70-130	12/14/16 01:05	
Toluene-d8 (S)	%	109	70-130	12/14/16 01:05	

LABORATORY CONTROL SAMPLE: 1889288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.9	98	70-130	
1,1,1-Trichloroethane	ug/L	50	56.3	113	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.4	99	70-130	
1,1,2-Trichloroethane	ug/L	50	56.1	112	70-130	
1,1-Dichloroethane	ug/L	50	55.7	111	70-130	
1,1-Dichloroethene	ug/L	50	58.5	117	70-132	
1,1-Dichloropropene	ug/L	50	55.0	110	70-130	
1,2,3-Trichlorobenzene	ug/L	50	47.6	95	70-135	
1,2,3-Trichloropropane	ug/L	50	48.2	96	70-130	
1,2,4-Trichlorobenzene	ug/L	50	49.2	98	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	45.9	92	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	52.2	104	70-130	
1,2-Dichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dichloroethane	ug/L	50	53.7	107	70-130	
1,2-Dichloropropane	ug/L	50	56.3	113	70-130	
1,3-Dichlorobenzene	ug/L	50	50.1	100	70-130	
1,3-Dichloropropane	ug/L	50	54.2	108	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1889288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.4	101	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1330	133	71-125	L0
2,2-Dichloropropane	ug/L	50	51.6	103	58-145	
2-Butanone (MEK)	ug/L	100	119	119	70-145	
2-Chlorotoluene	ug/L	50	51.4	103	70-130	
2-Hexanone	ug/L	100	103	103	70-144	
4-Chlorotoluene	ug/L	50	50.9	102	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	105	105	70-140	
Acetone	ug/L	100	108	108	50-175	
Benzene	ug/L	50	57.7	115	70-130	
Bromobenzene	ug/L	50	47.3	95	70-130	
Bromochloromethane	ug/L	50	57.9	116	70-130	
Bromodichloromethane	ug/L	50	57.3	115	70-130	
Bromoform	ug/L	50	44.2	88	70-130	
Bromomethane	ug/L	50	55.8	112	54-130	
Carbon tetrachloride	ug/L	50	50.8	102	70-132	
Chlorobenzene	ug/L	50	54.3	109	70-130	
Chloroethane	ug/L	50	59.0	118	64-134	
Chloroform	ug/L	50	55.0	110	70-130	
Chloromethane	ug/L	50	62.9	126	64-130	
cis-1,2-Dichloroethene	ug/L	50	56.1	112	70-131	
cis-1,3-Dichloropropene	ug/L	50	51.3	103	70-130	
Dibromochloromethane	ug/L	50	48.6	97	70-130	
Dibromomethane	ug/L	50	52.9	106	70-131	
Dichlorodifluoromethane	ug/L	50	57.0	114	56-130	
Diisopropyl ether	ug/L	50	55.1	110	70-130	
Ethylbenzene	ug/L	50	53.2	106	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.8	102	70-130	
m&p-Xylene	ug/L	100	108	108	70-130	
Methyl-tert-butyl ether	ug/L	50	59.9	120	70-130	
Methylene Chloride	ug/L	50	55.8	112	63-130	
Naphthalene	ug/L	50	48.5	97	70-138	
o-Xylene	ug/L	50	53.5	107	70-130	
p-Isopropyltoluene	ug/L	50	47.4	95	70-130	
Styrene	ug/L	50	53.9	108	70-130	
Tetrachloroethene	ug/L	50	49.7	99	70-130	
Toluene	ug/L	50	55.6	111	70-130	
trans-1,2-Dichloroethene	ug/L	50	57.5	115	70-130	
trans-1,3-Dichloropropene	ug/L	50	54.9	110	70-132	
Trichloroethene	ug/L	50	54.2	108	70-130	
Trichlorofluoromethane	ug/L	50	59.8	120	62-133	
Vinyl acetate	ug/L	100	102	102	66-157	
Vinyl chloride	ug/L	50	53.1	106	50-150	
Xylene (Total)	ug/L	150	161	107	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			97	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1889289 1889290

Parameter	Units	92322711012 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	40	40	39.9	40.8	100	102	70-130	2	30	
1,1,1-Trichloroethane	ug/L	26.5	40	40	76.9	80.6	126	135	70-130	5	30	M1
1,1,2,2-Tetrachloroethane	ug/L	ND	40	40	40.0	40.8	100	102	70-130	2	30	
1,1,2-Trichloroethane	ug/L	ND	40	40	47.2	47.4	118	119	70-130	0	30	
1,1-Dichloroethane	ug/L	64.0	40	40	112	114	121	125	70-130	1	30	
1,1-Dichloroethene	ug/L	257	40	40	292	296	87	96	70-166	1	30	
1,1-Dichloropropene	ug/L	ND	40	40	50.1	51.4	125	129	70-130	3	30	
1,2,3-Trichlorobenzene	ug/L	ND	40	40	36.3	35.7	91	89	70-130	2	30	
1,2,3-Trichloropropane	ug/L	ND	40	40	39.2	39.8	98	100	70-130	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	40	40	38.6	38.7	97	97	70-130	0	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	40	40	34.6	33.6	86	84	70-130	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	40	40	41.9	43.6	105	109	70-130	4	30	
1,2-Dichlorobenzene	ug/L	ND	40	40	41.3	42.0	103	105	70-130	2	30	
1,2-Dichloroethane	ug/L	3.3	40	40	48.1	49.9	112	116	70-130	4	30	
1,2-Dichloropropane	ug/L	ND	40	40	49.8	50.7	125	127	70-130	2	30	
1,3-Dichlorobenzene	ug/L	ND	40	40	43.6	42.2	109	106	70-130	3	30	
1,3-Dichloropropane	ug/L	ND	40	40	43.6	45.5	109	114	70-130	4	30	
1,4-Dichlorobenzene	ug/L	ND	40	40	42.3	42.6	106	106	70-130	1	30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	800	800	1010	1450	126	181	70-130	36	30	M0,R1
2,2-Dichloropropane	ug/L	ND	40	40	48.2	48.6	120	122	70-130	1	30	
2-Butanone (MEK)	ug/L	ND	80	80	95.0	96.1	119	120	70-130	1	30	
2-Chlorotoluene	ug/L	ND	40	40	45.8	45.3	115	113	70-130	1	30	
2-Hexanone	ug/L	ND	80	80	76.9	80.7	96	101	70-130	5	30	
4-Chlorotoluene	ug/L	ND	40	40	44.8	43.9	112	110	70-130	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	80	80	85.0	82.8	106	103	70-130	3	30	
Acetone	ug/L	ND	80	80	90.7	86.1	97	91	70-130	5	30	
Benzene	ug/L	ND	40	40	52.6	52.4	131	131	70-148	0	30	
Bromobenzene	ug/L	ND	40	40	41.4	40.8	103	102	70-130	1	30	
Bromochloromethane	ug/L	ND	40	40	51.0	52.6	127	131	70-130	3	30	M1
Bromodichloromethane	ug/L	ND	40	40	48.3	47.9	121	120	70-130	1	30	
Bromoform	ug/L	ND	40	40	35.7	37.5	89	94	70-130	5	30	
Bromomethane	ug/L	ND	40	40	46.6	52.4	117	131	70-130	12	30	M1
Carbon tetrachloride	ug/L	ND	40	40	43.7	43.7	109	109	70-130	0	30	
Chlorobenzene	ug/L	ND	40	40	46.5	47.4	116	118	70-146	2	30	
Chloroethane	ug/L	ND	40	40	54.9	56.5	137	141	70-130	3	30	M1
Chloroform	ug/L	ND	40	40	48.3	49.6	121	124	70-130	3	30	
Chloromethane	ug/L	ND	40	40	54.3	56.4	136	141	70-130	4	30	M1
cis-1,2-Dichloroethene	ug/L	ND	40	40	49.7	50.5	123	125	70-130	1	30	
cis-1,3-Dichloropropene	ug/L	ND	40	40	44.1	44.2	110	111	70-130	0	30	
Dibromochloromethane	ug/L	ND	40	40	38.5	41.0	96	103	70-130	6	30	
Dibromomethane	ug/L	ND	40	40	44.5	44.6	111	112	70-130	0	30	
Dichlorodifluoromethane	ug/L	ND	40	40	48.9	48.5	122	121	70-130	1	30	
Diisopropyl ether	ug/L	ND	40	40	44.4	46.8	111	117	70-130	5	30	
Ethylbenzene	ug/L	ND	40	40	46.9	48.4	117	121	70-130	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1889289 1889290

Parameter	Units	92322711012 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	40	40	40.9	41.4	102	104	70-130	1	30	
m&p-Xylene	ug/L	ND	80	80	93.9	97.3	117	122	70-130	4	30	
Methyl-tert-butyl ether	ug/L	ND	40	40	47.0	51.8	117	130	70-130	10	30	
Methylene Chloride	ug/L	ND	40	40	48.5	51.7	121	129	70-130	6	30	
Naphthalene	ug/L	ND	40	40	36.4	36.4	91	91	70-130	0	30	
o-Xylene	ug/L	ND	40	40	45.7	47.7	114	119	70-130	4	30	
p-Isopropyltoluene	ug/L	ND	40	40	41.3	40.2	103	101	70-130	3	30	
Styrene	ug/L	ND	40	40	46.0	47.8	115	120	70-130	4	30	
Tetrachloroethene	ug/L	ND	40	40	43.7	44.2	109	110	70-130	1	30	
Toluene	ug/L	ND	40	40	50.6	49.4	126	123	70-155	2	30	
trans-1,2-Dichloroethene	ug/L	ND	40	40	49.4	52.1	124	130	70-130	5	30	
trans-1,3-Dichloropropene	ug/L	ND	40	40	44.4	45.8	111	114	70-130	3	30	
Trichloroethene	ug/L	ND	40	40	48.0	48.8	120	122	69-151	2	30	
Trichlorofluoromethane	ug/L	ND	40	40	56.1	58.2	140	146	70-130	4	30	M1
Vinyl acetate	ug/L	ND	80	80	78.1	84.7	98	106	70-130	8	30	
Vinyl chloride	ug/L	ND	40	40	47.6	48.5	119	121	70-130	2	30	
1,2-Dichloroethane-d4 (S)	%						92	99	70-130			
4-Bromofluorobenzene (S)	%						98	104	70-130			
Toluene-d8 (S)	%						101	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340826 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92322711017, 92322711026

METHOD BLANK: 1890542 Matrix: Water
Associated Lab Samples: 92322711017, 92322711026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,1-Dichloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,1-Dichloroethene	ug/L	ND	1.0	12/14/16 13:57	
1,1-Dichloropropene	ug/L	ND	1.0	12/14/16 13:57	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
1,2,3-Trichloropropane	ug/L	ND	1.0	12/14/16 13:57	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	12/14/16 13:57	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/14/16 13:57	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
1,2-Dichloroethane	ug/L	ND	1.0	12/14/16 13:57	
1,2-Dichloropropane	ug/L	ND	1.0	12/14/16 13:57	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
1,3-Dichloropropane	ug/L	ND	1.0	12/14/16 13:57	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	12/14/16 13:57	
2,2-Dichloropropane	ug/L	ND	1.0	12/14/16 13:57	
2-Butanone (MEK)	ug/L	ND	5.0	12/14/16 13:57	
2-Chlorotoluene	ug/L	ND	1.0	12/14/16 13:57	
2-Hexanone	ug/L	ND	5.0	12/14/16 13:57	
4-Chlorotoluene	ug/L	ND	1.0	12/14/16 13:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	12/14/16 13:57	
Acetone	ug/L	ND	25.0	12/14/16 13:57	
Benzene	ug/L	ND	1.0	12/14/16 13:57	
Bromobenzene	ug/L	ND	1.0	12/14/16 13:57	
Bromochloromethane	ug/L	ND	1.0	12/14/16 13:57	
Bromodichloromethane	ug/L	ND	1.0	12/14/16 13:57	
Bromoform	ug/L	ND	1.0	12/14/16 13:57	
Bromomethane	ug/L	ND	2.0	12/14/16 13:57	
Carbon tetrachloride	ug/L	ND	1.0	12/14/16 13:57	
Chlorobenzene	ug/L	ND	1.0	12/14/16 13:57	
Chloroethane	ug/L	ND	1.0	12/14/16 13:57	
Chloroform	ug/L	ND	1.0	12/14/16 13:57	
Chloromethane	ug/L	ND	1.0	12/14/16 13:57	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/14/16 13:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/14/16 13:57	
Dibromochloromethane	ug/L	ND	1.0	12/14/16 13:57	
Dibromomethane	ug/L	ND	1.0	12/14/16 13:57	

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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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

METHOD BLANK: 1890542 Matrix: Water
Associated Lab Samples: 92322711017, 92322711026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	12/14/16 13:57	
Diisopropyl ether	ug/L	ND	1.0	12/14/16 13:57	
Ethylbenzene	ug/L	ND	1.0	12/14/16 13:57	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/14/16 13:57	
m&p-Xylene	ug/L	ND	2.0	12/14/16 13:57	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/14/16 13:57	
Methylene Chloride	ug/L	ND	2.0	12/14/16 13:57	
Naphthalene	ug/L	ND	1.0	12/14/16 13:57	
o-Xylene	ug/L	ND	1.0	12/14/16 13:57	
p-Isopropyltoluene	ug/L	ND	1.0	12/14/16 13:57	
Styrene	ug/L	ND	1.0	12/14/16 13:57	
Tetrachloroethene	ug/L	ND	1.0	12/14/16 13:57	
Toluene	ug/L	ND	1.0	12/14/16 13:57	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/14/16 13:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/14/16 13:57	
Trichloroethene	ug/L	ND	1.0	12/14/16 13:57	
Trichlorofluoromethane	ug/L	ND	1.0	12/14/16 13:57	
Vinyl acetate	ug/L	ND	2.0	12/14/16 13:57	
Vinyl chloride	ug/L	ND	1.0	12/14/16 13:57	
Xylene (Total)	ug/L	ND	1.0	12/14/16 13:57	
1,2-Dichloroethane-d4 (S)	%	92	70-130	12/14/16 13:57	
4-Bromofluorobenzene (S)	%	101	70-130	12/14/16 13:57	
Toluene-d8 (S)	%	102	70-130	12/14/16 13:57	

LABORATORY CONTROL SAMPLE: 1890543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	47.9	96	70-130	
1,1,1-Trichloroethane	ug/L	50	54.3	109	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.6	99	70-130	
1,1,2-Trichloroethane	ug/L	50	55.3	111	70-130	
1,1-Dichloroethane	ug/L	50	53.7	107	70-130	
1,1-Dichloroethene	ug/L	50	56.2	112	70-132	
1,1-Dichloropropene	ug/L	50	54.1	108	70-130	
1,2,3-Trichlorobenzene	ug/L	50	45.8	92	70-135	
1,2,3-Trichloropropane	ug/L	50	47.7	95	70-130	
1,2,4-Trichlorobenzene	ug/L	50	47.9	96	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	43.3	87	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	51.6	103	70-130	
1,2-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,2-Dichloroethane	ug/L	50	49.9	100	70-130	
1,2-Dichloropropane	ug/L	50	55.8	112	70-130	
1,3-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,3-Dichloropropane	ug/L	50	52.9	106	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

LABORATORY CONTROL SAMPLE: 1890543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1550	155	71-125	L0
2,2-Dichloropropane	ug/L	50	54.9	110	58-145	
2-Butanone (MEK)	ug/L	100	105	105	70-145	
2-Chlorotoluene	ug/L	50	52.3	105	70-130	
2-Hexanone	ug/L	100	98.0	98	70-144	
4-Chlorotoluene	ug/L	50	51.2	102	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	70-140	
Acetone	ug/L	100	92.2	92	50-175	
Benzene	ug/L	50	58.4	117	70-130	
Bromobenzene	ug/L	50	50.9	102	70-130	
Bromochloromethane	ug/L	50	54.9	110	70-130	
Bromodichloromethane	ug/L	50	55.7	111	70-130	
Bromoform	ug/L	50	45.0	90	70-130	
Bromomethane	ug/L	50	55.1	110	54-130	
Carbon tetrachloride	ug/L	50	49.1	98	70-132	
Chlorobenzene	ug/L	50	53.9	108	70-130	
Chloroethane	ug/L	50	57.5	115	64-134	
Chloroform	ug/L	50	53.2	106	70-130	
Chloromethane	ug/L	50	60.4	121	64-130	
cis-1,2-Dichloroethene	ug/L	50	54.0	108	70-131	
cis-1,3-Dichloropropene	ug/L	50	52.7	105	70-130	
Dibromochloromethane	ug/L	50	47.5	95	70-130	
Dibromomethane	ug/L	50	52.5	105	70-131	
Dichlorodifluoromethane	ug/L	50	53.2	106	56-130	
Diisopropyl ether	ug/L	50	53.5	107	70-130	
Ethylbenzene	ug/L	50	53.3	107	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.4	101	70-130	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	59.6	119	70-130	
Methylene Chloride	ug/L	50	52.1	104	63-130	
Naphthalene	ug/L	50	46.4	93	70-138	
o-Xylene	ug/L	50	50.9	102	70-130	
p-Isopropyltoluene	ug/L	50	48.7	97	70-130	
Styrene	ug/L	50	52.2	104	70-130	
Tetrachloroethene	ug/L	50	49.0	98	70-130	
Toluene	ug/L	50	56.0	112	70-130	
trans-1,2-Dichloroethene	ug/L	50	55.4	111	70-130	
trans-1,3-Dichloropropene	ug/L	50	56.5	113	70-132	
Trichloroethene	ug/L	50	53.7	107	70-130	
Trichlorofluoromethane	ug/L	50	56.4	113	62-133	
Vinyl acetate	ug/L	100	99.6	100	66-157	
Vinyl chloride	ug/L	50	51.2	102	50-150	
Xylene (Total)	ug/L	150	155	103	70-130	
1,2-Dichloroethane-d4 (S)	%			90	70-130	
4-Bromofluorobenzene (S)	%			98	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
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1890544

Parameter	Units	92323179003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	23.0	115	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	23.0	115	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	21.2	106	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	21.6	108	70-130	
1,1-Dichloroethane	ug/L	ND	20	21.5	108	70-130	
1,1-Dichloroethene	ug/L	ND	20	21.6	108	70-166	
1,1-Dichloropropene	ug/L	ND	20	20.8	104	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	19.2	96	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	21.7	109	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	19.7	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20.8	104	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	21.7	108	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	21.7	108	70-130	
1,2-Dichloroethane	ug/L	ND	20	22.5	112	70-130	
1,2-Dichloropropane	ug/L	ND	20	21.9	110	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	21.4	107	70-130	
1,3-Dichloropropane	ug/L	ND	20	22.0	110	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	21.1	105	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	621	155	70-130	M0
2,2-Dichloropropane	ug/L	ND	20	19.0	95	70-130	
2-Butanone (MEK)	ug/L	ND	40	38.9	97	70-130	
2-Chlorotoluene	ug/L	ND	20	22.4	112	70-130	
2-Hexanone	ug/L	ND	40	44.7	112	70-130	
4-Chlorotoluene	ug/L	ND	20	21.7	109	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	43.7	109	70-130	
Acetone	ug/L	ND	40	52.6	96	70-130	
Benzene	ug/L	ND	20	23.6	114	70-148	
Bromobenzene	ug/L	ND	20	22.1	110	70-130	
Bromochloromethane	ug/L	ND	20	21.7	109	70-130	
Bromodichloromethane	ug/L	ND	20	23.3	116	70-130	
Bromoform	ug/L	ND	20	20.6	103	70-130	
Bromomethane	ug/L	ND	20	18.6	93	70-130	
Carbon tetrachloride	ug/L	ND	20	23.5	117	70-130	
Chlorobenzene	ug/L	ND	20	22.4	112	70-146	
Chloroethane	ug/L	ND	20	24.4	122	70-130	
Chloroform	ug/L	ND	20	21.8	109	70-130	
Chloromethane	ug/L	ND	20	20.5	102	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	22.1	110	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	19.4	97	70-130	
Dibromochloromethane	ug/L	ND	20	20.0	100	70-130	
Dibromomethane	ug/L	ND	20	21.6	108	70-130	
Dichlorodifluoromethane	ug/L	ND	20	21.3	106	70-130	
Diisopropyl ether	ug/L	ND	20	20.3	98	70-130	
Ethylbenzene	ug/L	4.9	20	28.3	117	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	17.1	86	70-130	
m&p-Xylene	ug/L	14.0	40	61.5	119	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	18.8	94	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: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

MATRIX SPIKE SAMPLE: 1890544

Parameter	Units	92323179003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	17.3	87	70-130	
Naphthalene	ug/L	ND	20	21.8	107	70-130	
o-Xylene	ug/L	1.4	20	23.8	112	70-130	
p-Isopropyltoluene	ug/L	ND	20	21.2	106	70-130	
Styrene	ug/L	ND	20	22.1	110	70-130	
Tetrachloroethene	ug/L	ND	20	21.5	108	70-130	
Toluene	ug/L	ND	20	22.6	112	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	20.9	104	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	20.7	104	70-130	
Trichloroethene	ug/L	ND	20	22.2	111	69-151	
Trichlorofluoromethane	ug/L	ND	20	25.6	128	70-130	
Vinyl acetate	ug/L	ND	40	34.9	87	70-130	
Vinyl chloride	ug/L	ND	20	19.2	96	70-130	
1,2-Dichloroethane-d4 (S)	%				101	70-130	
4-Bromofluorobenzene (S)	%				99	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 1891696

Parameter	Units	92323191005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

SAMPLE DUPLICATE: 1891696

Parameter	Units	92323191005 Result	Dup Result	RPD	Max RPD	Qualifiers
Acetone	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	91	113	21		
4-Bromofluorobenzene (S)	%	102	93	9		
Toluene-d8 (S)	%	106	101	5		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340426 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 92322711001, 92322711002, 92322711003, 92322711004, 92322711005, 92322711006, 92322711007, 92322711008, 92322711009, 92322711010, 92322711011, 92322711014, 92322711015, 92322711016, 92322711017

METHOD BLANK: 1888170 Matrix: Water
Associated Lab Samples: 92322711001, 92322711002, 92322711003, 92322711004, 92322711005, 92322711006, 92322711007, 92322711008, 92322711009, 92322711010, 92322711011, 92322711014, 92322711015, 92322711016, 92322711017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/12/16 13:30	
1,2-Dichloroethane-d4 (S)	%	97	50-150	12/12/16 13:30	
Toluene-d8 (S)	%	88	50-150	12/12/16 13:30	

LABORATORY CONTROL SAMPLE: 1888171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	20.3	101	71-125	
1,2-Dichloroethane-d4 (S)	%			96	50-150	
Toluene-d8 (S)	%			88	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888172 1888173

Parameter	Units	92322711011 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	202	100	100	296	295	94	93	50-150	0	30	
1,2-Dichloroethane-d4 (S)	%						96	101	50-150		150	
Toluene-d8 (S)	%						87	88	50-150		150	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340459 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 92322711012, 92322711020, 92322711022, 92322711023, 92322711025, 92322711026

METHOD BLANK: 1888274 Matrix: Water
Associated Lab Samples: 92322711012, 92322711020, 92322711022, 92322711023, 92322711025, 92322711026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/12/16 22:15	
1,2-Dichloroethane-d4 (S)	%	85	50-150	12/12/16 22:15	
Toluene-d8 (S)	%	78	50-150	12/12/16 22:15	

LABORATORY CONTROL SAMPLE: 1888275

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	21.0	105	71-125	
1,2-Dichloroethane-d4 (S)	%			85	50-150	
Toluene-d8 (S)	%			80	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888276 1888277

Parameter	Units	92322711012 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	206	50	50	271	283	129	153	50-150	4	30	E,M1
1,2-Dichloroethane-d4 (S)	%						89	84	50-150		150	
Toluene-d8 (S)	%						79	77	50-150		150	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

QC Batch: 340600 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 92322711013, 92322711018, 92322711019, 92322711021, 92322711024

METHOD BLANK: 1888923 Matrix: Water
Associated Lab Samples: 92322711013, 92322711018, 92322711019, 92322711021, 92322711024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/13/16 12:23	
1,2-Dichloroethane-d4 (S)	%	83	50-150	12/13/16 12:23	
Toluene-d8 (S)	%	77	50-150	12/13/16 12:23	

LABORATORY CONTROL SAMPLE & LCSD: 1888924 1888925

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	19.0	19.1	95	95	71-125	0	30	
1,2-Dichloroethane-d4 (S)	%				82	88	50-150		150	
Toluene-d8 (S)	%				78	79	50-150		150	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

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.

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.

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.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92322711001	**MW-5R**	EPA 8260	340466		
92322711002	**MW-42**	EPA 8260	340466		
92322711003	**MW-18**	EPA 8260	340465		
92322711004	**MW-40D**	EPA 8260	340466		
92322711005	**MW-44**	EPA 8260	340466		
92322711006	**MW-21D**	EPA 8260	340465		
92322711007	**MW-22D**	EPA 8260	340465		
92322711008	**MW-20**	EPA 8260	340465		
92322711009	**MW-04**	EPA 8260	340602		
92322711010	**MW-09**	EPA 8260	340602		
92322711011	**MW-16D**	EPA 8260	340602		
92322711012	**RW-2D-120616**	EPA 8260	340638		
92322711013	**RW-1D-120616**	EPA 8260	340602		
92322711014	**EB-120616**	EPA 8260	340452		
92322711015	**RW-3S-120616**	EPA 8260	340638		
92322711016	**RW-2S-120616**	EPA 8260	340638		
92322711017	**RW-1S-120716**	EPA 8260	340826		
92322711018	**MW-27D-120716**	EPA 8260	340466		
92322711019	**MW-39-120716**	EPA 8260	340465		
92322711020	**MW-43-120716**	EPA 8260	340602		
92322711021	**MW-38R-120716**	EPA 8260	340466		
92322711022	**MW-16-120816**	EPA 8260	340602		
92322711023	**MW-200-120816**	EPA 8260	340602		
92322711024	**MW-03-120816**	EPA 8260	340465		
92322711025	**TRIP BLANKS**	EPA 8260	340465		
92322711026	**MW-100-120616**	EPA 8260	340826		
92322711001	**MW-5R**	EPA 8260B Mod.	340426		
92322711002	**MW-42**	EPA 8260B Mod.	340426		
92322711003	**MW-18**	EPA 8260B Mod.	340426		
92322711004	**MW-40D**	EPA 8260B Mod.	340426		
92322711005	**MW-44**	EPA 8260B Mod.	340426		
92322711006	**MW-21D**	EPA 8260B Mod.	340426		
92322711007	**MW-22D**	EPA 8260B Mod.	340426		
92322711008	**MW-20**	EPA 8260B Mod.	340426		
92322711009	**MW-04**	EPA 8260B Mod.	340426		
92322711010	**MW-09**	EPA 8260B Mod.	340426		
92322711011	**MW-16D**	EPA 8260B Mod.	340426		
92322711012	**RW-2D-120616**	EPA 8260B Mod.	340459		
92322711013	**RW-1D-120616**	EPA 8260B Mod.	340600		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER KOP-FLEX ONSITE
Pace Project No.: 92322711

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92322711014	**EB-120616**	EPA 8260B Mod.	340426		
92322711015	**RW-3S-120616**	EPA 8260B Mod.	340426		
92322711016	**RW-2S-120616**	EPA 8260B Mod.	340426		
92322711017	**RW-1S-120716**	EPA 8260B Mod.	340426		
92322711018	**MW-27D-120716**	EPA 8260B Mod.	340600		
92322711019	**MW-39-120716**	EPA 8260B Mod.	340600		
92322711020	**MW-43-120716**	EPA 8260B Mod.	340459		
92322711021	**MW-38R-120716**	EPA 8260B Mod.	340600		
92322711022	**MW-16-120816**	EPA 8260B Mod.	340459		
92322711023	**MW-200-120816**	EPA 8260B Mod.	340459		
92322711024	**MW-03-120816**	EPA 8260B Mod.	340600		
92322711025	**TRIP BLANKS**	EPA 8260B Mod.	340459		
92322711026	**MW-100-120616**	EPA 8260B Mod.	340459		

Pace Analytical®	Document Name: **Sample Condition Upon Receipt(SCUR)**	Document Revised: Sept. 21, 2016 Page 1 of 2
	Document No.: **F-CAR-CS-033-Rev.01**	Issuing Authority: Pace Quality Office

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐

WO#: 92322711

92322711

Sample Condition Upon Receipt

Client Name: WSP Parsons Brinckerhoff

Project #:

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:_____ ☐ Client

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

Date/Initials Person Examining Contents: 12/9/16

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

Thermometer: ☐ IR Gun ID: T1603 **Type of Ice:** ☐ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Correction Factor: **Cooler Temp Corrected (°C):** 2.8 **Biological Tissue Frozen?** ☐ Yes ☐ No ☐ N/A

Temp should be above freezing to 6°C

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.
Samples Field Filtered?	☐Yes	☐No	☐N/A	8. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	☐Yes	☐No	☐N/A	9. ~~MW-100 not present~~ RB 12/9/16
-Includes Date/Time/ID/Analysis Matrix: WT				~~6 extra vials RW 2D 120616~~
Headspace in VOA Vials (>5-6mm)?	☐Yes	☐No	☐N/A	10. 12/6/16 12:00
Trip Blank Present?	☐Yes	☐No	☐N/A	11.
Trip Blank Custody Seals Present?	☐Yes	☐No	☐N/A	

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐ Yes ☐ No

Person Contacted: ______________ Date/Time: ______________

Comments/Sample Discrepancy: ______________

Project Manager SCURF Review: [signature] **Date:** 12/9/16

Project Manager SRF Review: [signature] **Date:** 12/9/16

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

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

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

Project #

WO#: 92322711

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6												
2																6												
3																6												
4																6												
5																5												
6																6												
7																6												
8																6												
9																6												
10																6												
11																6												
12																5												

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 #

11.10

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

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

Project #

pg2

WO# : 92322711

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6												
2																												
3																12												
4																5												
5																6												
6																6												
7																6												
8																5												
9																6												
10																6												
11																6												
12																6												

pH Adjustment Log for Preserved Samples

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

11.2

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

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

pg3

Project # **WO# : 92322711**

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	SPST-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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6												
2																6												
3																6												
4																6												
5																												
6																												
7 Extra																6												
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 #

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:	3/4C0390	Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency
State / Location
MD

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	923272711
1	MW-5R	Ag	G	12/8/16	1250				6				X						X	X				001
2	MW-42	Ag	G	12/7/16	1320				6				X						X	X				002
3	MW-18	Ag	G	12/7/16	1345				6				X						X	X				003
4	MW-40D	Ag	G	12/7/16	1405				6				X						X	X				004
5	MW-44	Ag	G	12/7/16	1430				5				X						X	X				005
6	MW-21D	Ag	G	12/7/16	1455				6				X						X	X				006
7	MW-22D	Ag	G	12/7/16	1525				6				X						X	X				007
8	MW-20	Ag	G	12/7/16	1550				6				X						X	X				008
9	MW-04	Ag	G	12/7/16	1610				6				X						X	X				009
10	MW-09	Ag	G	12/8/16	0740				6				X						X	X				010
11	MW-16D	Ag	G	12/8/16	0805				6				X						X	X				011
12	MS/MSD-120816	Ag	G	12/8/16	0810				5				X						X	X				MS/MSD of MW-16D 011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/8/16	1430		12/9/16	1007	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER: [signature] DATE Signed: 12/8/16

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

2 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:	31400340	Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency
State / Location
MD

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	9232 2711
1	RW-2D-120616	AQ	G	12/6/16	1130				6				X						X	X					U12
2	MW-10D	AQ	G	12/6/16	1200				6				X						X	X					026
3	MS/MSD-120616	AQ	G	12/6/16	1130				12				X						X	X					MS/MSD of RW-2D U12-120616
4	RW-1D-120616	AQ	G	12/6/16	1355				5				X						X	X					U13
5	EB-120616	AQ	G	12/6/16	1410				6				X						X	X					U14
6	RW-3S-120616	AQ	G	12/6/16	1520				6				X						X	X					U15
7	RW-2S-120616	AQ	G	12/6/16	1520				6				X						X	X					U16
8	RW-1S-120616	AQ	G	12/7/16	0835				5				X						X	X					U17
9	MW-27D	AQ	G	12/7/16	0930				6				X						X	X					U18
10	MW-39	AQ	G	12/7/16	1000				6				X						X	X					U19
11	MW-43	AQ	G	12/7/16	1020				6				X						X	X					U20
12	MW-38R	AQ	G	12/7/16	1035				6				X						X	X					U21

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		12/8/16	1830	Pace HVL	12/9/16	1007	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER: [signature] DATE Signed: 12/8/16

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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3 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency
State / Location
MD

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: 8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	
1	MW-16	AQ	G	12/8/16	0840				6				X						X	X				022
2	MW-200	AQ	G	12/8/16	0800				6				X						X	X				023
3	MW-03	AQ	G	12/8/16	0930				6				X						X	X				024
4	Trip Blanks	—	Lab Provided	—	—	—	—		4				X								X	X		025
5																								~~026~~ extra JG 12/9/16
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		12/8/16	1830	by Pace RTP	12/9/16	1007	2.8 Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Roby Wallace

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/8/16

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical®	Document Name: **Sample Condition Upon Receipt(SCUR)**	Document Revised: Sept. 21, 2016 Page 1 of 2
	Document No.: **F-CAR-CS-033-Rev.01**	Issuing Authority: Pace Quality Office

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐

Sample Condition Upon Receipt

Client Name: WSP Parsons Brinckerhoff

Project #:

WO# : 92322711

92322711

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

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

Date/Initials Person Examining Contents: 12/9/16

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

Thermometer:

☐ IR Gun ID: T1603 **Type of Ice:** ☐ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Correction Factor: **Cooler Temp Corrected (°C):** 2.8 **Biological Tissue Frozen?** ☐ Yes ☐ No ☐ N/A

Temp should be above freezing to 6°C

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.
Samples Field Filtered?	☐ Yes	☐ No	☐ N/A	8. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9. ~~MW-100 not present~~ RG 12/9/16
-Includes Date/Time/ID/Analysis Matrix: WT				~~extra vials MW-2D 120616~~
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10. 12/6/16 12:00
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐ Yes ☐ No

Person Contacted: ____________________ Date/Time: ____________________

Comments/Sample Discrepancy:

____

Project Manager SCURF Review: [signature] **Date:** 12/9/16

Project Manager SRF Review: [signature] **Date:** 12/9/16

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

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

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

Project #

WO#: 92322711

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6													
2																6													
3																6													
4																6													
5																5													
6																6													
7																6													
8																6													
9																6													
10																6													
11																6													
12																5													

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 #

11.10

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

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

Project #

pg2

WO# : 92322711

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6												
2																												
3																12												
4																5												
5																6												
6																6												
7																6												
8																5												
9																6												
10																6												
11																6												
12																6												

pH Adjustment Log for Preserved Samples

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

11.2

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

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

pg3

Project # **WO# : 92322711**

PM: KRG Due Date: 12/16/16

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6												
2																6												
3																6												
4																8												
5																												
6																												
7 Extra																6												
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 #

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:	2140390	Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency	
State / Location	MD

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: 8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	9232711
1	MW-5R	AQ	G	12/8/16	1250				6				X						X	X				001
2	MW-42	AQ	G	12/7/16	1320				6				X						X	X				002
3	MW-18	AQ	G	12/7/16	1345				6				X						X	X				003
4	MW-40D	AQ	G	12/7/16	1405				6				X						X	X				004
5	MW-44	AQ	G	12/7/16	1430				5				X						X	X				005
6	MW-21D	AQ	G	12/7/16	1455				6				X						X	X				006
7	MW-22D	AQ	G	12/7/16	1525				6				X						X	X				007
8	MW-20	AQ	G	12/7/16	1550				6				X						X	X				008
9	MW-04	AQ	G	12/7/16	1610				6				X						X	X				009
10	MW-09	AQ	G	12/8/16	0740				6				X						X	X				010
11	MW-16D	AQ	G	12/8/16	0805				6				X						X	X				011
12	MS/MSD-120816	AQ	G	12/8/16	0810				5				X						X	X				MS/MSD of MW-16D 011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/8/16	1830		12/9/16	1007	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER: [signature]

DATE Signed: 12/8/16

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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2 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:	31400390	Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency	
State / Location	MD

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analyses Test: 8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	9232711
1	RW-2D-120616	Aq	G	12/6/16	1130				6				X						X	X				012
2	~~RW~~ MW-10D	Aq	G	12/6/16	1200				6				X						X	X				026
3	MS/MSD-120616	Aq	G	12/6/16	1130				12				X						X	X				MS/MSD of RW-2D 012-120616
4	RW-1D-120616	Aq	G	12/6/16	1355				5				X						X	X				013
5	EB-120616	Aq	G	12/6/16	1410				6				X						X	X				014
6	RW-3S-120616	Aq	G	12/6/16	1520				6				X						X	X				015
7	RW-2S-120616	Aq	G	12/6/16	1520				6				X						X	X				016
8	RW-1S-120616	Aq	G	12/6/16	0835				5				X						X	X				017
9	MW-27D	Aq	G	12/7/16	0930				6				X						X	X				018
10	MW-39	Aq	G	12/7/16	1000				6				X						X	X				019
11	MW-43	Aq	G	12/7/16	1020				6				X						X	X				020
12	MW-38R	Aq	G	12/7/16	1035				6				X						X	X				021

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		12/8/16	1830		12/9/16	1007	2.8 Y Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER:

DATE Signed: 12/8/16

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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3 3

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Onsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency	
State / Location	
MD	

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	9132711
1	MW-16	AQ	G	12/8/16	0840				6				X						X	X				022
2	MW-200	AQ	G	12/8/16	0800				6				X						X	X				023
3	MW-03	AQ	G	12/8/16	0930				6				X						X	X				024
4	Trip Blanks	—	Lab Provided	—					4				X								X	X		025
5																								026 extra JG 12/9/16
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		12/8/16	1830	Pace MVL	12/9/16	1007	2.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER:

DATE Signed: 12/8/16

WSP | PARSONS BRINCKERHOFF

13530 Dulles Technology Drive
Suite 300
Herndon, VA 20171
Main: 703-709-6500
wsp-pb.com/usa

Laboratory Task Order

Date: 12/01/16

Laboratory Name: Pace Analytical

WSP Project Name: Former Kop-Flex Onsite

WSP Project Manager Contact Information: Eric Johnson, 703-709-6500, eric.johnson@wspgroup.com

WSP Project & Task Numbers: 31400390/04

Terms & Conditions/Cost Reference:
Master Services Agreement (MSA) between WSP USA Corp., its affiliates and subsidiaries including WSP Services, Inc., WSP USA, LLC, and Parsons Brinckerhoff, Inc. (collectively "WSP") and Laboratory (executed on 7/26/16). Note: this Task Order incorporates all terms and conditions agreed to in the executed MSA. This Task Order assumes that work will be completed using standard rates agreed to in the MSA. If non-standard rates are required, Laboratory must communicate the proposed costs in writing prior to initiating work.

Task Description:
The following work is to be completed under this Task Order: Twenty-eight aqueous samples for VOCs using EPA Method 8260 and 1,4-Dioxane using EPA Method 8260 with SIM, plus MS/MSD, trip blanks, field blanks, and duplicates.

The Laboratory will provide sampling containers and supplies including ☒ two coolers, ☒sample containers and preservatives (as required by the method), ☒ two trip blanks, ☒chain-of-custody forms, ☒ one liters deionized water, ☒temperature blanks, ☒custody seals, ☒return labels for the following analysis method(s) and number of samples:

Number of Samples	Media	Analysis Method(s)
28	Aqueous	VOCs (8260), 1,4-Dioxane (8260 w/SIM)
2	Aqueous	MS/MSD
2	Aqueous	Trip Blanks for VOCs (8260), 1,4-Dioxane(8260 w/SIM)
1	Aqueous	Field Blank for VOCs (8260), 1,4-Dioxane (8260 w/SIM)

Special Instructions:
Samples will be collected via HydraSleeve, so MS/MSD will be three 40 mL VOAs each.

The following are project-specific details to be followed:

- The Laboratory will deliver the containers and supplies to the following address by Monday, December 5th:
  Robert Wallace
  WSP | Parsons Brinckerhoff
  13530 Dulles Technology Drive, Suite 300
  Herndon, VA 20171
  703-709-6500
- Acceptable reporting limits must equal Maryland Cleanup Standard for Soil and Groundwater. Compounds that are not detected should be reported to the lowest detectable limit.
- Sampling will commence on Tuesday, December 6th.
- A standard turn-around time of ten business days is requested.

- An Electronic Data Deliverable (EDD) in ERIMS format and a final LEVEL II report in Portable Document Format (PDF) are requested. In accordance with the MSA, penalties will be assessed if the complete and correct data deliverables are not in compliance with the MSA and this Task Order.
- The final EDD and PDF reports should be provided via electronic mail addressed to eric.johnson@wspgroup.com and robert.wallace@wspgroup.com.

Note: if the Laboratory discovers that it is unable to meet the sample container arrival deadline for any reason, WSP is to be notified a minimum of 24 hours before the deadline and the Laboratory must provide an alternate deadline, which cannot exceed 24 to 48 hours beyond the original deadline.

If required, project-specific certificates of insurance and any additional documents noted above must be submitted via e-mail to: WSPEEUSA-Contracts@WSPGroup.com before commencing work under this Task Order.

Task Invoicing:
Laboratory is to submit invoices to WSP USA Corp., Attention: **Environment Accounts Payable**, and submit them via email to: AccountsPayable@WSPGroup.com or via regular mail to: **WSP, Environmental Accounts Payable**, 13530 Dulles Technology Drive, Suite 300, Herndon, VA 20171. **All invoices must reference the WSP project number and laboratory project identification number.**

A copy of the final invoice should also be e-mailed to eric.johnson@wspgroup.com.

The work described in this Task Order is authorized by:

WSP Signature: Robert E. Johnson

Printed Name: Robert E. Johnson

Title: Senior Technical Manager

Date: December 1, 2016

The work described in this Task Order is accepted by:

Laboratory Signature: _____

Printed Name: _____

Title: _____

Date: _____

Please sign and return the original of this Task Order to Rob Wallace at robert.wallace@wspgroup.com.

REV. 06/01/2016

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

January 12, 2017

Eric Johnson
WSP Environmental Strategies
11190 Sunrise Valley Dr.
Suite #300
Reston, VA 20191

RE: Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Dear Eric Johnson:
Enclosed are the analytical results for sample(s) received by the laboratory on January 04, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Keith Green, WSP Environmental Strategies

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

CERTIFICATIONS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92325191001	**MW-23-010217**	Water	01/02/17 08:05	01/04/17 11:35
92325191002	**MW-41D-010217**	Water	01/02/17 12:10	01/04/17 11:35
92325191003	**MW-1D-010217**	Water	01/02/17 12:50	01/04/17 11:35
92325191004	**TRIP BLANK**	Water	01/02/17 00:00	01/04/17 11:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92325191001	**MW-23-010217**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92325191002	**MW-41D-010217**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92325191003	**MW-1D-010217**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92325191004	**TRIP BLANK**	EPA 8260	ZDO	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-23-010217 **Lab ID: 92325191001** Collected: 01/02/17 08:05 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		01/12/17 00:02	67-64-1	
Benzene	ND	ug/L	2.0	2		01/12/17 00:02	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		01/12/17 00:02	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		01/12/17 00:02	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		01/12/17 00:02	75-27-4	
Bromoform	ND	ug/L	2.0	2		01/12/17 00:02	75-25-2	
Bromomethane	ND	ug/L	4.0	2		01/12/17 00:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		01/12/17 00:02	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		01/12/17 00:02	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	108-90-7	
Chloroethane	ND	ug/L	2.0	2		01/12/17 00:02	75-00-3	
Chloroform	ND	ug/L	2.0	2		01/12/17 00:02	67-66-3	
Chloromethane	ND	ug/L	2.0	2		01/12/17 00:02	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		01/12/17 00:02	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		01/12/17 00:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		01/12/17 00:02	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		01/12/17 00:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		01/12/17 00:02	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		01/12/17 00:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		01/12/17 00:02	75-71-8	
1,1-Dichloroethane	**26.4**	ug/L	2.0	2		01/12/17 00:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	2.0	2		01/12/17 00:02	107-06-2	
1,1-Dichloroethene	**140**	ug/L	2.0	2		01/12/17 00:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		01/12/17 00:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		01/12/17 00:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		01/12/17 00:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		01/12/17 00:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		01/12/17 00:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		01/12/17 00:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		01/12/17 00:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		01/12/17 00:02	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		01/12/17 00:02	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	300	2		01/12/17 00:02	123-91-1	L3
Ethylbenzene	ND	ug/L	2.0	2		01/12/17 00:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		01/12/17 00:02	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		01/12/17 00:02	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		01/12/17 00:02	99-87-6	
Methylene Chloride	**8.3**	ug/L	4.0	2		01/12/17 00:02	75-09-2	C9
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		01/12/17 00:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.0	2		01/12/17 00:02	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		01/12/17 00:02	91-20-3	
Styrene	ND	ug/L	2.0	2		01/12/17 00:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		01/12/17 00:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		01/12/17 00:02	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-23-010217 **Lab ID: 92325191001** Collected: 01/02/17 08:05 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		01/12/17 00:02	127-18-4	
Toluene	ND	ug/L	2.0	2		01/12/17 00:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		01/12/17 00:02	120-82-1	
1,1,1-Trichloroethane	**17.0**	ug/L	2.0	2		01/12/17 00:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		01/12/17 00:02	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		01/12/17 00:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		01/12/17 00:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		01/12/17 00:02	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		01/12/17 00:02	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		01/12/17 00:02	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		01/12/17 00:02	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		01/12/17 00:02	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		01/12/17 00:02	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	2		01/12/17 00:02	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	2		01/12/17 00:02	17060-07-0	
Toluene-d8 (S)	105	%	70-130	2		01/12/17 00:02	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**151**	ug/L	10.0	5		01/05/17 13:07	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	50-150	1		01/05/17 12:48	17060-07-0	
Toluene-d8 (S)	106	%	50-150	1		01/05/17 12:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-41D-010217 **Lab ID: 92325191002** Collected: 01/02/17 12:10 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		01/05/17 17:14	67-64-1	
Benzene	ND	ug/L	1.0	1		01/05/17 17:14	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		01/05/17 17:14	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		01/05/17 17:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		01/05/17 17:14	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/05/17 17:14	75-25-2	
Bromomethane	ND	ug/L	2.0	1		01/05/17 17:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		01/05/17 17:14	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		01/05/17 17:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/05/17 17:14	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/05/17 17:14	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/05/17 17:14	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		01/05/17 17:14	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		01/05/17 17:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		01/05/17 17:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		01/05/17 17:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		01/05/17 17:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		01/05/17 17:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		01/05/17 17:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/05/17 17:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/05/17 17:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/05/17 17:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/05/17 17:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/05/17 17:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/05/17 17:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		01/05/17 17:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		01/05/17 17:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		01/05/17 17:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/05/17 17:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/05/17 17:14	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		01/05/17 17:14	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		01/05/17 17:14	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		01/05/17 17:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		01/05/17 17:14	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		01/05/17 17:14	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		01/05/17 17:14	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		01/05/17 17:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		01/05/17 17:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		01/05/17 17:14	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		01/05/17 17:14	91-20-3	
Styrene	ND	ug/L	1.0	1		01/05/17 17:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		01/05/17 17:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/05/17 17:14	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-41D-010217 **Lab ID: 92325191002** Collected: 01/02/17 12:10 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		01/05/17 17:14	127-18-4	
Toluene	ND	ug/L	1.0	1		01/05/17 17:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		01/05/17 17:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/05/17 17:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/05/17 17:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/05/17 17:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/05/17 17:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/05/17 17:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		01/05/17 17:14	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		01/05/17 17:14	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		01/05/17 17:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		01/05/17 17:14	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/05/17 17:14	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		01/05/17 17:14	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-130	1		01/05/17 17:14	17060-07-0	
Toluene-d8 (S)	90	%	70-130	1		01/05/17 17:14	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**2.8**	ug/L	2.0	1		01/05/17 13:25	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	50-150	1		01/05/17 13:25	17060-07-0	
Toluene-d8 (S)	106	%	50-150	1		01/05/17 13:25	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-1D-010217 **Lab ID: 92325191003** Collected: 01/02/17 12:50 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	50.0	2		01/05/17 16:40	67-64-1	
Benzene	ND	ug/L	2.0	2		01/05/17 16:40	71-43-2	
Bromobenzene	ND	ug/L	2.0	2		01/05/17 16:40	108-86-1	
Bromochloromethane	ND	ug/L	2.0	2		01/05/17 16:40	74-97-5	
Bromodichloromethane	ND	ug/L	2.0	2		01/05/17 16:40	75-27-4	
Bromoform	ND	ug/L	2.0	2		01/05/17 16:40	75-25-2	
Bromomethane	ND	ug/L	4.0	2		01/05/17 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	2		01/05/17 16:40	78-93-3	
Carbon tetrachloride	ND	ug/L	2.0	2		01/05/17 16:40	56-23-5	
Chlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	108-90-7	
Chloroethane	ND	ug/L	2.0	2		01/05/17 16:40	75-00-3	
Chloroform	ND	ug/L	2.0	2		01/05/17 16:40	67-66-3	
Chloromethane	ND	ug/L	2.0	2		01/05/17 16:40	74-87-3	
2-Chlorotoluene	ND	ug/L	2.0	2		01/05/17 16:40	95-49-8	
4-Chlorotoluene	ND	ug/L	2.0	2		01/05/17 16:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	2		01/05/17 16:40	96-12-8	
Dibromochloromethane	ND	ug/L	2.0	2		01/05/17 16:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	2.0	2		01/05/17 16:40	106-93-4	
Dibromomethane	ND	ug/L	2.0	2		01/05/17 16:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	106-46-7	
Dichlorodifluoromethane	ND	ug/L	2.0	2		01/05/17 16:40	75-71-8	
1,1-Dichloroethane	**72.0**	ug/L	2.0	2		01/05/17 16:40	75-34-3	
1,2-Dichloroethane	**4.7**	ug/L	2.0	2		01/05/17 16:40	107-06-2	
1,1-Dichloroethene	**375**	ug/L	2.0	2		01/05/17 16:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	2.0	2		01/05/17 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	2.0	2		01/05/17 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	2.0	2		01/05/17 16:40	78-87-5	
1,3-Dichloropropane	ND	ug/L	2.0	2		01/05/17 16:40	142-28-9	
2,2-Dichloropropane	ND	ug/L	2.0	2		01/05/17 16:40	594-20-7	
1,1-Dichloropropene	ND	ug/L	2.0	2		01/05/17 16:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	2.0	2		01/05/17 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	2.0	2		01/05/17 16:40	10061-02-6	
Diisopropyl ether	ND	ug/L	2.0	2		01/05/17 16:40	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	300	2		01/05/17 16:40	123-91-1	L3
Ethylbenzene	ND	ug/L	2.0	2		01/05/17 16:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	2.0	2		01/05/17 16:40	87-68-3	
2-Hexanone	ND	ug/L	10.0	2		01/05/17 16:40	591-78-6	
p-Isopropyltoluene	ND	ug/L	2.0	2		01/05/17 16:40	99-87-6	
Methylene Chloride	ND	ug/L	4.0	2		01/05/17 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2		01/05/17 16:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	2.0	2		01/05/17 16:40	1634-04-4	
Naphthalene	ND	ug/L	2.0	2		01/05/17 16:40	91-20-3	
Styrene	ND	ug/L	2.0	2		01/05/17 16:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	2.0	2		01/05/17 16:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.0	2		01/05/17 16:40	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: MW-1D-010217 **Lab ID: 92325191003** Collected: 01/02/17 12:50 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	2.0	2		01/05/17 16:40	127-18-4	
Toluene	ND	ug/L	2.0	2		01/05/17 16:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	2.0	2		01/05/17 16:40	120-82-1	
1,1,1-Trichloroethane	**37.5**	ug/L	2.0	2		01/05/17 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	2.0	2		01/05/17 16:40	79-00-5	
Trichloroethene	ND	ug/L	2.0	2		01/05/17 16:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	2.0	2		01/05/17 16:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.0	2		01/05/17 16:40	96-18-4	
Vinyl acetate	ND	ug/L	4.0	2		01/05/17 16:40	108-05-4	
Vinyl chloride	ND	ug/L	2.0	2		01/05/17 16:40	75-01-4	
Xylene (Total)	ND	ug/L	2.0	2		01/05/17 16:40	1330-20-7	
m&p-Xylene	ND	ug/L	4.0	2		01/05/17 16:40	179601-23-1	
o-Xylene	ND	ug/L	2.0	2		01/05/17 16:40	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	2		01/05/17 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130	2		01/05/17 16:40	17060-07-0	
Toluene-d8 (S)	106	%	70-130	2		01/05/17 16:40	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**236**	ug/L	5.0	2.5		01/05/17 14:22	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	50-150	1		01/05/17 14:03	17060-07-0	
Toluene-d8 (S)	107	%	50-150	1		01/05/17 14:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: TRIP BLANK **Lab ID: 92325191004** Collected: 01/02/17 00:00 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	25.0	1		01/05/17 14:55	67-64-1	
Benzene	ND	ug/L	1.0	1		01/05/17 14:55	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		01/05/17 14:55	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		01/05/17 14:55	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		01/05/17 14:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		01/05/17 14:55	75-25-2	
Bromomethane	ND	ug/L	2.0	1		01/05/17 14:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		01/05/17 14:55	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		01/05/17 14:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		01/05/17 14:55	75-00-3	
Chloroform	ND	ug/L	1.0	1		01/05/17 14:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		01/05/17 14:55	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		01/05/17 14:55	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		01/05/17 14:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		01/05/17 14:55	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		01/05/17 14:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		01/05/17 14:55	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		01/05/17 14:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		01/05/17 14:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		01/05/17 14:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		01/05/17 14:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		01/05/17 14:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		01/05/17 14:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		01/05/17 14:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		01/05/17 14:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		01/05/17 14:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		01/05/17 14:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		01/05/17 14:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		01/05/17 14:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		01/05/17 14:55	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		01/05/17 14:55	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		01/05/17 14:55	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		01/05/17 14:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		01/05/17 14:55	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		01/05/17 14:55	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		01/05/17 14:55	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		01/05/17 14:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		01/05/17 14:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		01/05/17 14:55	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		01/05/17 14:55	91-20-3	
Styrene	ND	ug/L	1.0	1		01/05/17 14:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		01/05/17 14:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		01/05/17 14:55	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Sample: TRIP BLANK **Lab ID: 92325191004** Collected: 01/02/17 00:00 Received: 01/04/17 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	1.0	1		01/05/17 14:55	127-18-4	
Toluene	ND	ug/L	1.0	1		01/05/17 14:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		01/05/17 14:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		01/05/17 14:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		01/05/17 14:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		01/05/17 14:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		01/05/17 14:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		01/05/17 14:55	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		01/05/17 14:55	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		01/05/17 14:55	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		01/05/17 14:55	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		01/05/17 14:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		01/05/17 14:55	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		01/05/17 14:55	460-00-4	
1,2-Dichloroethane-d4 (S)	115	%	70-130	1		01/05/17 14:55	17060-07-0	
Toluene-d8 (S)	134	%	70-130	1		01/05/17 14:55	2037-26-5	S3
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		01/05/17 12:30	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	50-150	1		01/05/17 12:30	17060-07-0	
Toluene-d8 (S)	106	%	50-150	1		01/05/17 12:30	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

QC Batch: 343500 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92325191002, 92325191003, 92325191004

METHOD BLANK: 1905315 Matrix: Water
Associated Lab Samples: 92325191002, 92325191003, 92325191004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,1,1-Trichloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,1-Dichloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,1-Dichloroethene	ug/L	ND	1.0	01/05/17 13:46	
1,1-Dichloropropene	ug/L	ND	1.0	01/05/17 13:46	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/05/17 13:46	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	01/05/17 13:46	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	01/05/17 13:46	
1,2-Dichlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
1,2-Dichloroethane	ug/L	ND	1.0	01/05/17 13:46	
1,2-Dichloropropane	ug/L	ND	1.0	01/05/17 13:46	
1,3-Dichlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
1,3-Dichloropropane	ug/L	ND	1.0	01/05/17 13:46	
1,4-Dichlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	01/05/17 13:46	
2,2-Dichloropropane	ug/L	ND	1.0	01/05/17 13:46	
2-Butanone (MEK)	ug/L	ND	5.0	01/05/17 13:46	
2-Chlorotoluene	ug/L	ND	1.0	01/05/17 13:46	
2-Hexanone	ug/L	ND	5.0	01/05/17 13:46	
4-Chlorotoluene	ug/L	ND	1.0	01/05/17 13:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	01/05/17 13:46	
Acetone	ug/L	ND	25.0	01/05/17 13:46	
Benzene	ug/L	ND	1.0	01/05/17 13:46	
Bromobenzene	ug/L	ND	1.0	01/05/17 13:46	
Bromochloromethane	ug/L	ND	1.0	01/05/17 13:46	
Bromodichloromethane	ug/L	ND	1.0	01/05/17 13:46	
Bromoform	ug/L	ND	1.0	01/05/17 13:46	
Bromomethane	ug/L	ND	2.0	01/05/17 13:46	
Carbon tetrachloride	ug/L	ND	1.0	01/05/17 13:46	
Chlorobenzene	ug/L	ND	1.0	01/05/17 13:46	
Chloroethane	ug/L	ND	1.0	01/05/17 13:46	
Chloroform	ug/L	ND	1.0	01/05/17 13:46	
Chloromethane	ug/L	ND	1.0	01/05/17 13:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/05/17 13:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/05/17 13:46	
Dibromochloromethane	ug/L	ND	1.0	01/05/17 13:46	
Dibromomethane	ug/L	ND	1.0	01/05/17 13:46	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

METHOD BLANK: 1905315 Matrix: Water
Associated Lab Samples: 92325191002, 92325191003, 92325191004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	01/05/17 13:46	
Diisopropyl ether	ug/L	ND	1.0	01/05/17 13:46	
Ethylbenzene	ug/L	ND	1.0	01/05/17 13:46	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	01/05/17 13:46	
m&p-Xylene	ug/L	ND	2.0	01/05/17 13:46	
Methyl-tert-butyl ether	ug/L	ND	1.0	01/05/17 13:46	
Methylene Chloride	ug/L	ND	2.0	01/05/17 13:46	
Naphthalene	ug/L	ND	1.0	01/05/17 13:46	
o-Xylene	ug/L	ND	1.0	01/05/17 13:46	
p-Isopropyltoluene	ug/L	ND	1.0	01/05/17 13:46	
Styrene	ug/L	ND	1.0	01/05/17 13:46	
Tetrachloroethene	ug/L	ND	1.0	01/05/17 13:46	
Toluene	ug/L	ND	1.0	01/05/17 13:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/05/17 13:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/05/17 13:46	
Trichloroethene	ug/L	ND	1.0	01/05/17 13:46	
Trichlorofluoromethane	ug/L	ND	1.0	01/05/17 13:46	
Vinyl acetate	ug/L	ND	2.0	01/05/17 13:46	
Vinyl chloride	ug/L	ND	1.0	01/05/17 13:46	
Xylene (Total)	ug/L	ND	1.0	01/05/17 13:46	
1,2-Dichloroethane-d4 (S)	%	115	70-130	01/05/17 13:46	
4-Bromofluorobenzene (S)	%	100	70-130	01/05/17 13:46	
Toluene-d8 (S)	%	107	70-130	01/05/17 13:46	

LABORATORY CONTROL SAMPLE: 1905316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.9	114	70-130	
1,1,1-Trichloroethane	ug/L	50	53.5	107	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	54.4	109	70-130	
1,1,2-Trichloroethane	ug/L	50	53.0	106	70-130	
1,1-Dichloroethane	ug/L	50	56.2	112	70-130	
1,1-Dichloroethene	ug/L	50	55.0	110	70-132	
1,1-Dichloropropene	ug/L	50	54.4	109	70-130	
1,2,3-Trichlorobenzene	ug/L	50	52.9	106	70-135	
1,2,3-Trichloropropane	ug/L	50	53.8	108	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.2	100	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	58.8	118	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	55.8	112	70-130	
1,2-Dichlorobenzene	ug/L	50	52.6	105	70-130	
1,2-Dichloroethane	ug/L	50	53.8	108	70-130	
1,2-Dichloropropane	ug/L	50	52.1	104	70-130	
1,3-Dichlorobenzene	ug/L	50	52.1	104	70-130	
1,3-Dichloropropane	ug/L	50	58.8	118	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

LABORATORY CONTROL SAMPLE: 1905316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.6	101	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1600	160	71-125	L0
2,2-Dichloropropane	ug/L	50	55.6	111	58-145	
2-Butanone (MEK)	ug/L	100	119	119	70-145	
2-Chlorotoluene	ug/L	50	53.4	107	70-130	
2-Hexanone	ug/L	100	124	124	70-144	
4-Chlorotoluene	ug/L	50	53.1	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	110	110	70-140	
Acetone	ug/L	100	136	136	50-175	
Benzene	ug/L	50	52.9	106	70-130	
Bromobenzene	ug/L	50	53.3	107	70-130	
Bromochloromethane	ug/L	50	48.3	97	70-130	
Bromodichloromethane	ug/L	50	55.9	112	70-130	
Bromoform	ug/L	50	49.2	98	70-130	
Bromomethane	ug/L	50	52.5	105	54-130	
Carbon tetrachloride	ug/L	50	52.0	104	70-132	
Chlorobenzene	ug/L	50	51.7	103	70-130	
Chloroethane	ug/L	50	55.6	111	64-134	
Chloroform	ug/L	50	50.1	100	70-130	
Chloromethane	ug/L	50	53.6	107	64-130	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	70-131	
cis-1,3-Dichloropropene	ug/L	50	56.7	113	70-130	
Dibromochloromethane	ug/L	50	52.1	104	70-130	
Dibromomethane	ug/L	50	47.5	95	70-131	
Dichlorodifluoromethane	ug/L	50	49.8	100	56-130	
Diisopropyl ether	ug/L	50	65.1	130	70-130	
Ethylbenzene	ug/L	50	52.4	105	70-130	
Hexachloro-1,3-butadiene	ug/L	50	54.3	109	70-130	
m&p-Xylene	ug/L	100	107	107	70-130	
Methyl-tert-butyl ether	ug/L	50	63.6	127	70-130	
Methylene Chloride	ug/L	50	61.1	122	63-130	
Naphthalene	ug/L	50	55.4	111	70-138	
o-Xylene	ug/L	50	53.7	107	70-130	
p-Isopropyltoluene	ug/L	50	50.2	100	70-130	
Styrene	ug/L	50	53.7	107	70-130	
Tetrachloroethene	ug/L	50	48.3	97	70-130	
Toluene	ug/L	50	49.2	98	70-130	
trans-1,2-Dichloroethene	ug/L	50	59.2	118	70-130	
trans-1,3-Dichloropropene	ug/L	50	59.4	119	70-132	
Trichloroethene	ug/L	50	48.5	97	70-130	
Trichlorofluoromethane	ug/L	50	58.7	117	62-133	
Vinyl acetate	ug/L	100	106	106	66-157	
Vinyl chloride	ug/L	50	42.5	85	50-150	
Xylene (Total)	ug/L	150	161	107	70-130	
1,2-Dichloroethane-d4 (S)	%			116	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			97	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

MATRIX SPIKE SAMPLE: 1905317

Parameter	Units	92325182003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.7	109	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	23.2	116	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	24.7	124	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	25.6	128	70-130	
1,1-Dichloroethane	ug/L	ND	20	22.8	114	70-130	
1,1-Dichloroethene	ug/L	ND	20	26.7	133	70-166	
1,1-Dichloropropene	ug/L	ND	20	24.7	123	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	18.5	93	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	24.8	124	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.1	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	21.4	107	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	22.1	111	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	22.0	110	70-130	
1,2-Dichloroethane	ug/L	ND	20	23.2	115	70-130	
1,2-Dichloropropane	ug/L	ND	20	22.9	114	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	22.8	114	70-130	
1,3-Dichloropropane	ug/L	ND	20	23.8	119	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	22.1	111	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	450	112	70-130	
2,2-Dichloropropane	ug/L	ND	20	23.3	116	70-130	
2-Butanone (MEK)	ug/L	ND	40	48.7	122	70-130	
2-Chlorotoluene	ug/L	ND	20	23.7	118	70-130	
2-Hexanone	ug/L	ND	40	47.4	119	70-130	
4-Chlorotoluene	ug/L	ND	20	23.6	118	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	51.6	129	70-130	
Acetone	ug/L	ND	40	56.8	138	70-130	M1
Benzene	ug/L	ND	20	24.2	121	70-148	
Bromobenzene	ug/L	ND	20	23.2	116	70-130	
Bromochloromethane	ug/L	ND	20	22.0	110	70-130	
Bromodichloromethane	ug/L	ND	20	24.7	123	70-130	
Bromoform	ug/L	ND	20	21.1	106	70-130	
Bromomethane	ug/L	ND	20	19.1	95	70-130	
Carbon tetrachloride	ug/L	ND	20	23.7	119	70-130	
Chlorobenzene	ug/L	ND	20	22.6	113	70-146	
Chloroethane	ug/L	ND	20	28.5	142	70-130	M1
Chloroform	ug/L	ND	20	22.4	112	70-130	
Chloromethane	ug/L	ND	20	28.2	139	70-130	M1
cis-1,2-Dichloroethene	ug/L	ND	20	22.9	111	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	23.1	116	70-130	
Dibromochloromethane	ug/L	ND	20	21.3	106	70-130	
Dibromomethane	ug/L	ND	20	21.2	106	70-130	
Dichlorodifluoromethane	ug/L	ND	20	24.3	122	70-130	
Diisopropyl ether	ug/L	ND	20	24.8	124	70-130	
Ethylbenzene	ug/L	ND	20	23.0	115	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.8	109	70-130	
m&p-Xylene	ug/L	ND	40	49.6	124	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	25.4	127	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

MATRIX SPIKE SAMPLE: 1905317

Parameter	Units	92325182003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	26.0	130	70-130	
Naphthalene	ug/L	ND	20	19.3	96	70-130	
o-Xylene	ug/L	ND	20	25.7	128	70-130	
p-Isopropyltoluene	ug/L	ND	20	22.0	110	70-130	
Styrene	ug/L	ND	20	26.2	131	70-130	M1
Tetrachloroethene	ug/L	ND	20	22.0	110	70-130	
Toluene	ug/L	ND	20	22.7	114	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	28.0	140	70-130	M1
trans-1,3-Dichloropropene	ug/L	ND	20	25.1	125	70-130	
Trichloroethene	ug/L	1.2	20	23.0	109	69-151	
Trichlorofluoromethane	ug/L	ND	20	29.3	146	70-130	M1
Vinyl acetate	ug/L	ND	40	40.6	102	70-130	
Vinyl chloride	ug/L	ND	20	22.8	114	70-130	
1,2-Dichloroethane-d4 (S)	%				114	70-130	
4-Bromofluorobenzene (S)	%				114	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 1905318

Parameter	Units	92325328004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

SAMPLE DUPLICATE: 1905318

Parameter	Units	92325328004 Result	Dup Result	RPD	Max RPD	Qualifiers
Acetone	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	.31J		30	
cis-1,2-Dichloroethene	ug/L	ND	.74J		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	.93J		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	1.0	1.3	22	30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	115	116	1		
4-Bromofluorobenzene (S)	%	96	99	2		
Toluene-d8 (S)	%	111	116	4		

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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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

QC Batch: 343975 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92325191001

METHOD BLANK: 1908104 Matrix: Water
Associated Lab Samples: 92325191001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,1,1-Trichloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,1-Dichloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,1-Dichloroethene	ug/L	ND	1.0	01/11/17 19:06	
1,1-Dichloropropene	ug/L	ND	1.0	01/11/17 19:06	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
1,2,3-Trichloropropane	ug/L	ND	1.0	01/11/17 19:06	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	01/11/17 19:06	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	01/11/17 19:06	
1,2-Dichlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
1,2-Dichloroethane	ug/L	ND	1.0	01/11/17 19:06	
1,2-Dichloropropane	ug/L	ND	1.0	01/11/17 19:06	
1,3-Dichlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
1,3-Dichloropropane	ug/L	ND	1.0	01/11/17 19:06	
1,4-Dichlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	01/11/17 19:06	
2,2-Dichloropropane	ug/L	ND	1.0	01/11/17 19:06	
2-Butanone (MEK)	ug/L	ND	5.0	01/11/17 19:06	
2-Chlorotoluene	ug/L	ND	1.0	01/11/17 19:06	
2-Hexanone	ug/L	ND	5.0	01/11/17 19:06	
4-Chlorotoluene	ug/L	ND	1.0	01/11/17 19:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	01/11/17 19:06	
Acetone	ug/L	ND	25.0	01/11/17 19:06	
Benzene	ug/L	ND	1.0	01/11/17 19:06	
Bromobenzene	ug/L	ND	1.0	01/11/17 19:06	
Bromochloromethane	ug/L	ND	1.0	01/11/17 19:06	
Bromodichloromethane	ug/L	ND	1.0	01/11/17 19:06	
Bromoform	ug/L	ND	1.0	01/11/17 19:06	
Bromomethane	ug/L	ND	2.0	01/11/17 19:06	
Carbon tetrachloride	ug/L	ND	1.0	01/11/17 19:06	
Chlorobenzene	ug/L	ND	1.0	01/11/17 19:06	
Chloroethane	ug/L	ND	1.0	01/11/17 19:06	
Chloroform	ug/L	ND	1.0	01/11/17 19:06	
Chloromethane	ug/L	ND	1.0	01/11/17 19:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/11/17 19:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/11/17 19:06	
Dibromochloromethane	ug/L	ND	1.0	01/11/17 19:06	
Dibromomethane	ug/L	ND	1.0	01/11/17 19:06	

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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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

METHOD BLANK: 1908104 Matrix: Water
Associated Lab Samples: 92325191001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	01/11/17 19:06	
Diisopropyl ether	ug/L	ND	1.0	01/11/17 19:06	
Ethylbenzene	ug/L	ND	1.0	01/11/17 19:06	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	01/11/17 19:06	
m&p-Xylene	ug/L	ND	2.0	01/11/17 19:06	
Methyl-tert-butyl ether	ug/L	ND	1.0	01/11/17 19:06	
Methylene Chloride	ug/L	ND	2.0	01/11/17 19:06	
Naphthalene	ug/L	ND	1.0	01/11/17 19:06	
o-Xylene	ug/L	ND	1.0	01/11/17 19:06	
p-Isopropyltoluene	ug/L	ND	1.0	01/11/17 19:06	
Styrene	ug/L	ND	1.0	01/11/17 19:06	
Tetrachloroethene	ug/L	ND	1.0	01/11/17 19:06	
Toluene	ug/L	ND	1.0	01/11/17 19:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/11/17 19:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/11/17 19:06	
Trichloroethene	ug/L	ND	1.0	01/11/17 19:06	
Trichlorofluoromethane	ug/L	ND	1.0	01/11/17 19:06	
Vinyl acetate	ug/L	ND	2.0	01/11/17 19:06	
Vinyl chloride	ug/L	ND	1.0	01/11/17 19:06	
Xylene (Total)	ug/L	ND	1.0	01/11/17 19:06	
1,2-Dichloroethane-d4 (S)	%	95	70-130	01/11/17 19:06	
4-Bromofluorobenzene (S)	%	102	70-130	01/11/17 19:06	
Toluene-d8 (S)	%	104	70-130	01/11/17 19:06	

LABORATORY CONTROL SAMPLE: 1908105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.3	105	70-130	
1,1,1-Trichloroethane	ug/L	50	48.4	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.8	100	70-130	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	46.4	93	70-130	
1,1-Dichloroethene	ug/L	50	50.4	101	70-132	
1,1-Dichloropropene	ug/L	50	51.9	104	70-130	
1,2,3-Trichlorobenzene	ug/L	50	49.9	100	70-135	
1,2,3-Trichloropropane	ug/L	50	50.7	101	70-130	
1,2,4-Trichlorobenzene	ug/L	50	48.5	97	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	48.3	97	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	50.8	102	70-130	
1,2-Dichlorobenzene	ug/L	50	49.6	99	70-130	
1,2-Dichloroethane	ug/L	50	47.4	95	70-130	
1,2-Dichloropropane	ug/L	50	47.5	95	70-130	
1,3-Dichlorobenzene	ug/L	50	49.2	98	70-130	
1,3-Dichloropropane	ug/L	50	52.5	105	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

LABORATORY CONTROL SAMPLE: 1908105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	48.0	96	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1300	130	71-125	L0
2,2-Dichloropropane	ug/L	50	45.7	91	58-145	
2-Butanone (MEK)	ug/L	100	101	101	70-145	
2-Chlorotoluene	ug/L	50	47.8	96	70-130	
2-Hexanone	ug/L	100	96.5	96	70-144	
4-Chlorotoluene	ug/L	50	48.7	97	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.6	94	70-140	
Acetone	ug/L	100	91.6	92	50-175	
Benzene	ug/L	50	49.3	99	70-130	
Bromobenzene	ug/L	50	49.4	99	70-130	
Bromochloromethane	ug/L	50	47.6	95	70-130	
Bromodichloromethane	ug/L	50	48.6	97	70-130	
Bromoform	ug/L	50	49.8	100	70-130	
Bromomethane	ug/L	50	52.0	104	54-130	
Carbon tetrachloride	ug/L	50	49.9	100	70-132	
Chlorobenzene	ug/L	50	50.7	101	70-130	
Chloroethane	ug/L	50	46.3	93	64-134	
Chloroform	ug/L	50	45.8	92	70-130	
Chloromethane	ug/L	50	48.7	97	64-130	
cis-1,2-Dichloroethene	ug/L	50	46.0	92	70-131	
cis-1,3-Dichloropropene	ug/L	50	50.7	101	70-130	
Dibromochloromethane	ug/L	50	52.9	106	70-130	
Dibromomethane	ug/L	50	48.1	96	70-131	
Dichlorodifluoromethane	ug/L	50	47.2	94	56-130	
Diisopropyl ether	ug/L	50	50.5	101	70-130	
Ethylbenzene	ug/L	50	50.2	100	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.7	103	70-130	
m&p-Xylene	ug/L	100	99.5	99	70-130	
Methyl-tert-butyl ether	ug/L	50	51.2	102	70-130	
Methylene Chloride	ug/L	50	51.2	102	63-130	
Naphthalene	ug/L	50	49.5	99	70-138	
o-Xylene	ug/L	50	49.4	99	70-130	
p-Isopropyltoluene	ug/L	50	46.9	94	70-130	
Styrene	ug/L	50	50.8	102	70-130	
Tetrachloroethene	ug/L	50	47.4	95	70-130	
Toluene	ug/L	50	47.5	95	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.3	99	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.5	101	70-132	
Trichloroethene	ug/L	50	49.8	100	70-130	
Trichlorofluoromethane	ug/L	50	51.1	102	62-133	
Vinyl acetate	ug/L	100	94.2	94	66-157	
Vinyl chloride	ug/L	50	42.0	84	50-150	
Xylene (Total)	ug/L	150	149	99	70-130	
1,2-Dichloroethane-d4 (S)	%			105	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
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(704)875-9092

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1908106 1908107

Parameter	Units	92325610002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	19.8	20.5	99	103	70-130	4	30	
1,1,1-Trichloroethane	ug/L	ND	20	20	22.3	22.9	112	114	70-130	2	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.9	18.9	94	94	70-130	0	30	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.0	20.4	100	102	70-130	2	30	
1,1-Dichloroethane	ug/L	ND	20	20	21.7	21.4	108	107	70-130	2	30	
1,1-Dichloroethene	ug/L	ND	20	20	24.3	24.3	122	122	70-166	0	30	
1,1-Dichloropropene	ug/L	ND	20	20	24.0	24.0	120	120	70-130	0	30	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	19.4	19.7	97	98	70-130	1	30	
1,2,3-Trichloropropane	ug/L	ND	20	20	19.3	20.1	96	100	70-130	4	30	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	19.8	19.6	99	98	70-130	1	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	18.4	18.2	92	91	70-130	1	30	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.8	19.4	99	97	70-130	2	30	
1,2-Dichlorobenzene	ug/L	ND	20	20	20.5	20.3	103	102	70-130	1	30	
1,2-Dichloroethane	ug/L	ND	20	20	19.9	20.0	100	100	70-130	0	30	
1,2-Dichloropropane	ug/L	ND	20	20	20.9	21.4	105	107	70-130	3	30	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.5	20.4	102	102	70-130	1	30	
1,3-Dichloropropane	ug/L	ND	20	20	20.0	20.1	100	101	70-130	1	30	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.5	20.1	102	101	70-130	2	30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	400	238	433	60	108	70-130	58	30	M0,R1
2,2-Dichloropropane	ug/L	ND	20	20	21.0	20.4	105	102	70-130	3	30	
2-Butanone (MEK)	ug/L	ND	40	40	39.5	40.2	99	101	70-130	2	30	
2-Chlorotoluene	ug/L	ND	20	20	20.6	21.0	103	105	70-130	2	30	
2-Hexanone	ug/L	ND	40	40	37.0	38.6	92	97	70-130	4	30	
4-Chlorotoluene	ug/L	ND	20	20	20.6	21.1	103	105	70-130	2	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	38.4	38.0	96	95	70-130	1	30	
Acetone	ug/L	ND	40	40	38.9	39.2	97	98	70-130	1	30	
Benzene	ug/L	ND	20	20	23.0	22.7	115	114	70-148	1	30	
Bromobenzene	ug/L	ND	20	20	20.9	20.5	105	103	70-130	2	30	
Bromochloromethane	ug/L	ND	20	20	19.6	20.3	98	102	70-130	4	30	
Bromodichloromethane	ug/L	ND	20	20	20.8	21.2	104	106	70-130	2	30	
Bromoform	ug/L	ND	20	20	17.4	17.5	87	87	70-130	1	30	
Bromomethane	ug/L	ND	20	20	21.6	22.5	108	113	70-130	4	30	
Carbon tetrachloride	ug/L	ND	20	20	24.5	23.7	122	119	70-130	3	30	
Chlorobenzene	ug/L	ND	20	20	21.7	22.0	109	110	70-146	1	30	
Chloroethane	ug/L	ND	20	20	22.6	21.8	113	109	70-130	3	30	
Chloroform	ug/L	ND	20	20	20.7	20.7	104	104	70-130	0	30	
Chloromethane	ug/L	ND	20	20	23.0	22.7	115	113	70-130	1	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.7	21.2	104	106	70-130	2	30	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.6	20.9	103	105	70-130	2	30	
Dibromochloromethane	ug/L	ND	20	20	19.0	20.0	95	100	70-130	5	30	
Dibromomethane	ug/L	ND	20	20	20.5	20.7	103	104	70-130	1	30	
Dichlorodifluoromethane	ug/L	ND	20	20	21.7	21.4	108	107	70-130	1	30	
Diisopropyl ether	ug/L	ND	20	20	19.7	20.3	99	101	70-130	3	30	
Ethylbenzene	ug/L	ND	20	20	22.0	22.1	110	110	70-130	0	30	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1908106 1908107

Parameter	Units	92325610002 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	22.1	22.9	111	114	70-130	3	30	
m&p-Xylene	ug/L	ND	40	40	43.8	44.6	110	112	70-130	2	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.0	20.2	100	101	70-130	1	30	
Methylene Chloride	ug/L	1.4J	20	20	23.0	22.7	108	107	70-130	1	30	
Naphthalene	ug/L	ND	20	20	19.1	19.3	95	97	70-130	1	30	
o-Xylene	ug/L	ND	20	20	21.1	21.6	106	108	70-130	2	30	
p-Isopropyltoluene	ug/L	ND	20	20	20.7	20.7	104	104	70-130	0	30	
Styrene	ug/L	ND	20	20	21.1	21.4	105	107	70-130	1	30	
Tetrachloroethene	ug/L	ND	20	20	20.1	20.3	100	102	70-130	1	30	
Toluene	ug/L	ND	20	20	22.0	22.1	110	111	70-155	1	30	
trans-1,2-Dichloroethene	ug/L	ND	20	20	23.2	23.2	116	116	70-130	0	30	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.3	20.8	102	104	70-130	2	30	
Trichloroethene	ug/L	0.70J	20	20	23.5	23.4	114	113	69-151	0	30	
Trichlorofluoromethane	ug/L	ND	20	20	25.0	25.1	125	125	70-130	0	30	
Vinyl acetate	ug/L	ND	40	40	28.4	28.7	71	72	70-130	1	30	
Vinyl chloride	ug/L	ND	20	20	20.2	20.1	101	101	70-130	0	30	
1,2-Dichloroethane-d4 (S)	%						100	101	70-130			
4-Bromofluorobenzene (S)	%						101	103	70-130			
Toluene-d8 (S)	%						100	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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

QC Batch: 343356 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 92325191001, 92325191002, 92325191003, 92325191004

METHOD BLANK: 1904454 Matrix: Water
Associated Lab Samples: 92325191001, 92325191002, 92325191003, 92325191004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	01/05/17 10:56	
1,2-Dichloroethane-d4 (S)	%	101	50-150	01/05/17 10:56	
Toluene-d8 (S)	%	104	50-150	01/05/17 10:56	

LABORATORY CONTROL SAMPLE & LCSD: 1904455 1904456

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	17.6	20.1	88	101	71-125	13	30	
1,2-Dichloroethane-d4 (S)	%				105	97	50-150		150	
Toluene-d8 (S)	%				106	105	50-150		150	

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: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

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.

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.

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.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

C9	Common Laboratory Contaminant.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER KOP-FLEX-OFFSITE
Pace Project No.: 92325191

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92325191001	**MW-23-010217**	EPA 8260	343975		
92325191002	**MW-41D-010217**	EPA 8260	343500		
92325191003	**MW-1D-010217**	EPA 8260	343500		
92325191004	**TRIP BLANK**	EPA 8260	343500		
92325191001	**MW-23-010217**	EPA 8260B Mod.	343356		
92325191002	**MW-41D-010217**	EPA 8260B Mod.	343356		
92325191003	**MW-1D-010217**	EPA 8260B Mod.	343356		
92325191004	**TRIP BLANK**	EPA 8260B Mod.	343356		

Pace Analytical®	Document Name: **Sample Condition Upon Receipt(SCUR)**	Document Revised: Sept. 21, 2016 Page 1 of 2
	Document No.: **F-CAR-CS-033-Rev.01**	Issuing Authority: Pace Quality Office

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☑ **Raleigh** ☐ **Mechanicsville** ☐

Sample Condition Upon Receipt

Client Name: WSP

Project # WO#: 92325191

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

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

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

Date/Initials Person Examining Contents: JM 1.4.17

Thermometer: ☑ IR Gun ID: T1603 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☑ Samples on ice, cooling process has begun

Correction Factor: **Cooler Temp Corrected (°C):** 3.4 **Biological Tissue Frozen?** ☐ Yes ☑ No ☐ N/A

Temp should be above freezing to 6°C

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.
Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8. Note if sediment is visible in the dissolved container
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	

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Sample Discrepancy: _____

Project Manager SCURF Review: JY **Date:** 1/5/17

Project Manager SRF Review: JY **Date:** 1/5/17

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

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

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

Proj

WO#: 92325191

PM: KRG Due Date: 01/11/17

CLIENT: 92-WSP

128

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)	BP3S-250 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP3Z-250 mL Plastic ZN Acetate & NaOH (>9)	BP3C-250 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)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1																6													
2																6													
3																5													
4																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 #

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	WSP / Parsons Brickerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive	Copy To:		Company Name:	
Suite 300, Herndon, VA 20171				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax	Project Name:	Former Kop-Flex Offsite	Pace Project Manager:	kevin.godwin@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	4362-1

Regulatory Agency	
State / Location	MD

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260	8260 SIM 1,4-Dioxane	8260 Trip Blank	8260 SIM 1,4 D Trip Blank	Residual Chlorine (Y/N)	42325191
1	MW-23-010217			1/2/17	0805				6				X						X	X				001
2	MW-41D-010217			1/2/17	1210				6				X						X	X				002
3	MW-1D-010317			1/2/17	1250				5				X						X	X				003
4	Trip Blank								4				X								X	X		004
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		1/3/17	1800	PACE HVL	1-4-17	1135	3.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Rob Wallace

SIGNATURE of SAMPLER:

DATE Signed: 1/3/17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)