

VIA ELECTRONIC MAIL

March 14, 2017

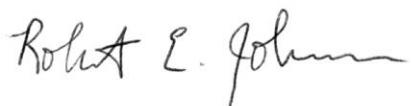
Erich Weissbart, P.G.
Land and Chemicals Division
U.S. Environmental Protection Agency, Region III
701 Mapes Road
Fort Meade, MD 20755

Re: Quarterly Status Report No. 1 – Offsite Area
Former Kop-Flex Facility Site, Hanover, Maryland

Dear Erich:

On behalf of EMERSUB 16 LLC, a subsidiary of Emerson Electric Co., WSP USA Corp. is submitting this status report describing the investigation and remediation activities conducted in the fourth quarter 2016 in the offsite portion of the Former Kop-Flex Facility Site in Hanover, Maryland. The report also describes the activities planned for the first quarter of 2017. 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

REJ:rlo
k:\emerson\kop-flex\reporting\status reports\EPA progress reports\cm progress report 1\

Enclosure

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

Quarterly Progress Report No. 1 – Offsite Area

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 Offsite Activities Conducted during October 2016 through December 2016

1.1 Residential Well Sampling

- Based on the September 2016 sampling results for the Tomchick potable well (7932 Andorick Drive), EMERSUB 16 and WSP proposed to re-sample other deep (\geq 200 feet below ground surface) residential wells in and around the Andorick Acres community. A total of six residences with deep wells were identified within this area; the locations of these properties are shown in Figure 1. MDE approved the proposed potable well re-sampling in a September 30th, 2016 email communication to WSP.
- On October 17, 2016, WSP sent, via Federal Express, access request letters to the property owners whose properties are listed on Figure 1. This correspondence requested approval from the homeowner to access the property to collect another water sample(s) and, if necessary, information concerning the well and treatment equipment for the home water system.
- On November 3, 2016, water samples were collected from the following residences with potable wells designated for re-sampling:
 - 1227 Old Camp Meade Road
 - 1409 Bittersweet Road
 - 1405 Pride Tree Circle
 - 7924 Green Moss Glen

The residential wells located at 1397 Teaberry Lane and 1408 Pride Tree Circle were not sampled due to the inability to obtain access from the homeowner. (A second access request letter was sent to these two property owners on December 9, 2016.)

The analytical results for these residential wells sampled were received on November 18, 2016. A copy of the certified laboratory analytical report is included in Enclosure A. The pre-treatment water sample collected from the Maddox potable well (1227 Old Camp Meade Road) had a 1,1-DCE concentration of 8.8 µg/l, which exceeded the USEPA federal drinking water standard and MDE groundwater quality standard of 7 µg/l. This compound was not detected above the applicable groundwater quality standard in the post-treatment sample. Other site-related VOCs were present

Quarterly Progress Report No. 1 – Offsite Area

Former Kop-Flex Facility Site

October 2016 through December 2016

in the Maddox well sample at trace to very low levels that were below their respective comparative criteria. No site-related VOCs were detected in the other potable well samples. WSP verbally communicated the analytical results for the water samples collected from the Maddox potable well to the homeowner and MDE in late November 2016.

- Based on the analytical results for the November 2016 sample from the Maddox well, WSP and EMERSUB 16 proposed to contact the owners of seven residential properties in the area to seek access for collecting a sample(s) from wells that are being used as a source of potable water. The locations of these properties are also shown in Figure 1. Based on available information, two of the properties have wells completed to depths corresponding to the impacted portion of the aquifer system. No definitive information is available as to the existence of potable wells on the other properties although there presence is likely given the prevalence of wells in the area. MDE approved the proposed potable well sampling in a December 14th, 2016 email communication to WSP.
- On December 16, 2016, WSP staff visited the Maddox residence to gather additional information concerning the treatment system for the well water. Based on an examination of the treatment equipment and follow-up-research, it was determined the system included two mixed media filter tanks, with one of the filters in each tank comprised of granular activated carbon. According to the homeowner, the treatment system was installed in 2013 and there has been no repairs or maintenance performed on the filter tanks.
- Transmittal letters presenting the results of the early November 2016 residential well sampling were sent to the following homeowners on December 30th, 2016:
 - 1405 Pride Tree Circle
 - 1409 Bittersweet Lane
 - 7924 Green Moss Glen

As mentioned previously in the report, neither 1,4-dioxane nor site-related chlorinated VOCs were detected in these samples.

1.2 Quarterly Offsite Groundwater Sampling

- The offsite monitoring wells were sampled the week of December 5, 2016, in conjunction with the onsite baseline groundwater sampling event. Table 1 lists the screened intervals and HydraSleeve™ sample retrieval depths for each monitoring well.
- As part of the December 2016 sampling event, WSP obtained water level measurements from all offsite monitoring wells. A contour map of the potentiometric surface for the semi-confined portion of the Lower Patapsco Aquifer based on the contouring of the water level data from the onsite and offsite deep wells is provided in Figure 2. Evaluation of the hydraulic head data indicates a generally south-southeast flow path for the groundwater in the semi-confined zone of the aquifer.
- The analytical results for the offsite monitoring well samples are presented in Table 2. (A copy of the certified laboratory analytical report for these samples is provided in Enclosure B.)

No site-related VOCs were detected in the samples from the two shallow wells (MW-25-40 and MW-28-45) screened in the unconfined zone of the Lower Patapsco aquifer (Figure 3). For the wells completed in the deeper confined zone, VOC concentrations in the sample from well MW-25-

Quarterly Progress Report No. 1 – Offsite Area

Former Kop-Flex Facility Site

October 2016 through December 2016

130 are lower than the results for offsite well MW-24D, which is located on the Williams-Scotsman property immediately north of Maryland Route 100. The lower VOC concentrations in the sample from the deeper well at the MW-25 location (MW-25-192) is consistent with the vertical distribution of constituents determined from groundwater profiling at other deep well locations. The sampling data for the deep monitoring wells located further to the south and east of the MW-25 location contained very low concentrations of site-related VOCs (Figure 3). Statistical evaluation of the sampling data using the Mann-Kendall test indicates no trend in the concentrations of site-related VOCs at the downgradient monitoring points, which suggests some degree of stability concerning the extent of the VOC plume in the area.

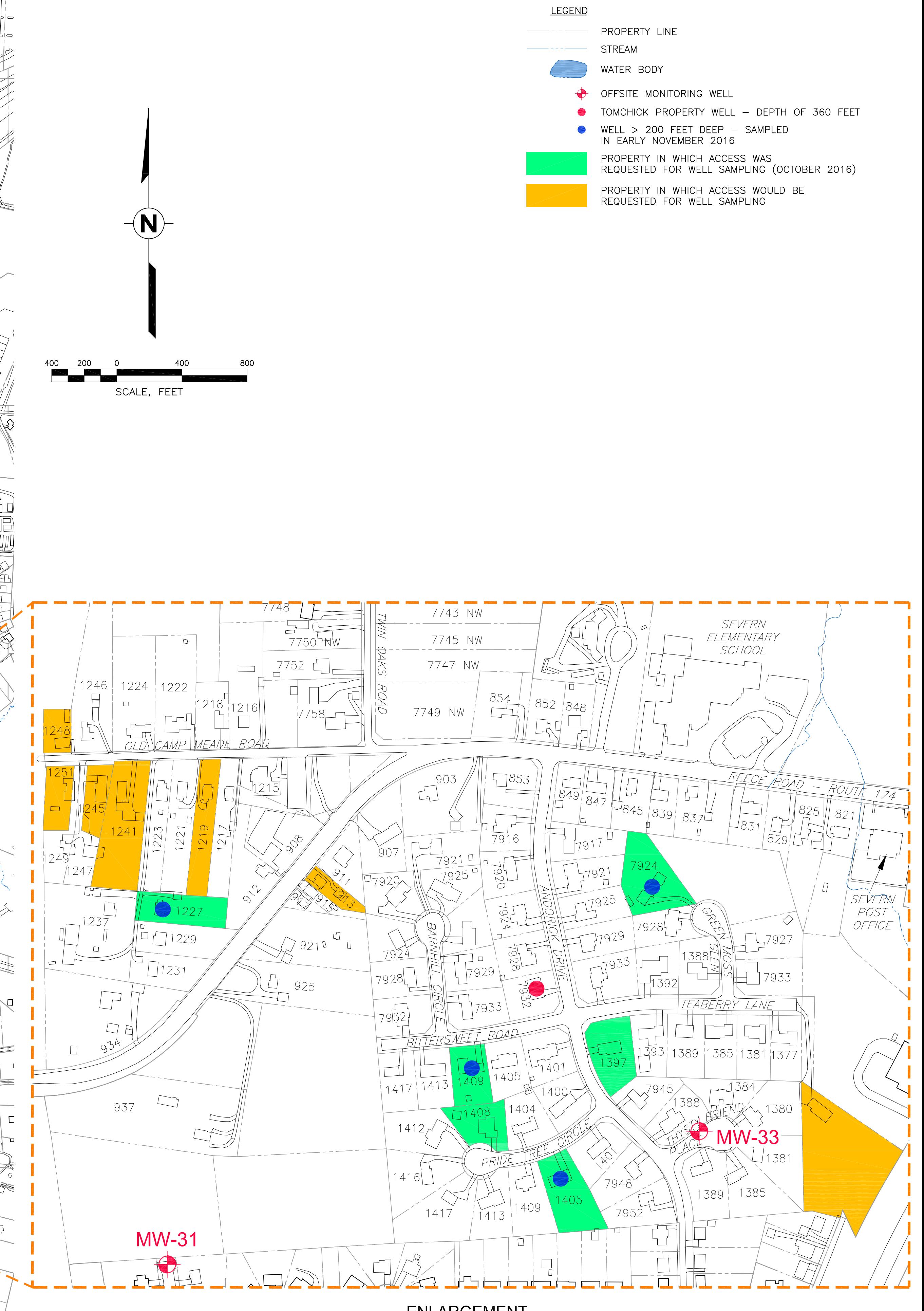
2.0 Planned Offsite Activities for Next Reporting Period (January 2017 – March 2017)

- Continue to communicate with Anne Arundel County Department of Public Works regarding its review of the Right-of-Way permit applications for the additional groundwater monitoring wells. Upon issuance of the permits, begin installation of monitoring wells in accordance with the approved Offsite Groundwater Monitoring Plan.
- Prepare and mail access request letters to the owners of the residential properties in the vicinity of the Maddox home (1227 Old Camp Meade Road). Upon receipt of the signed access agreements, schedule the collection of water samples from the residential wells, and submit the sampling results to the homeowners and MDE.
- Upon receipt of the well permit from Anne Arundel County, complete the installation of a replacement potable well at the Tomchick residence and abandonment of the existing water supply well.
- Conduct quarterly sampling of the offsite monitoring wells in residential areas south of Maryland Route 100 in late February 2017.
- Collect semi-annual water samples in March 2017 from residential wells at 7740 Twin Oaks Road, 1227 Old Camp Meade Road, and 854 Reece Road.

3.0 Key Personnel/Facility Changes

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

Figures



REVISIONS		DESCRIPTION	
REV	DATE	REV	DATE
△	Approved	△	Approved
△	Revised	△	Revised
△	Revised	△	Revised

PROPERTIES WITH POTABLE WELLS DESIGNATED FOR SAMPLING

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSUB 16 LLC
ST. LOUIS, MISSOURI

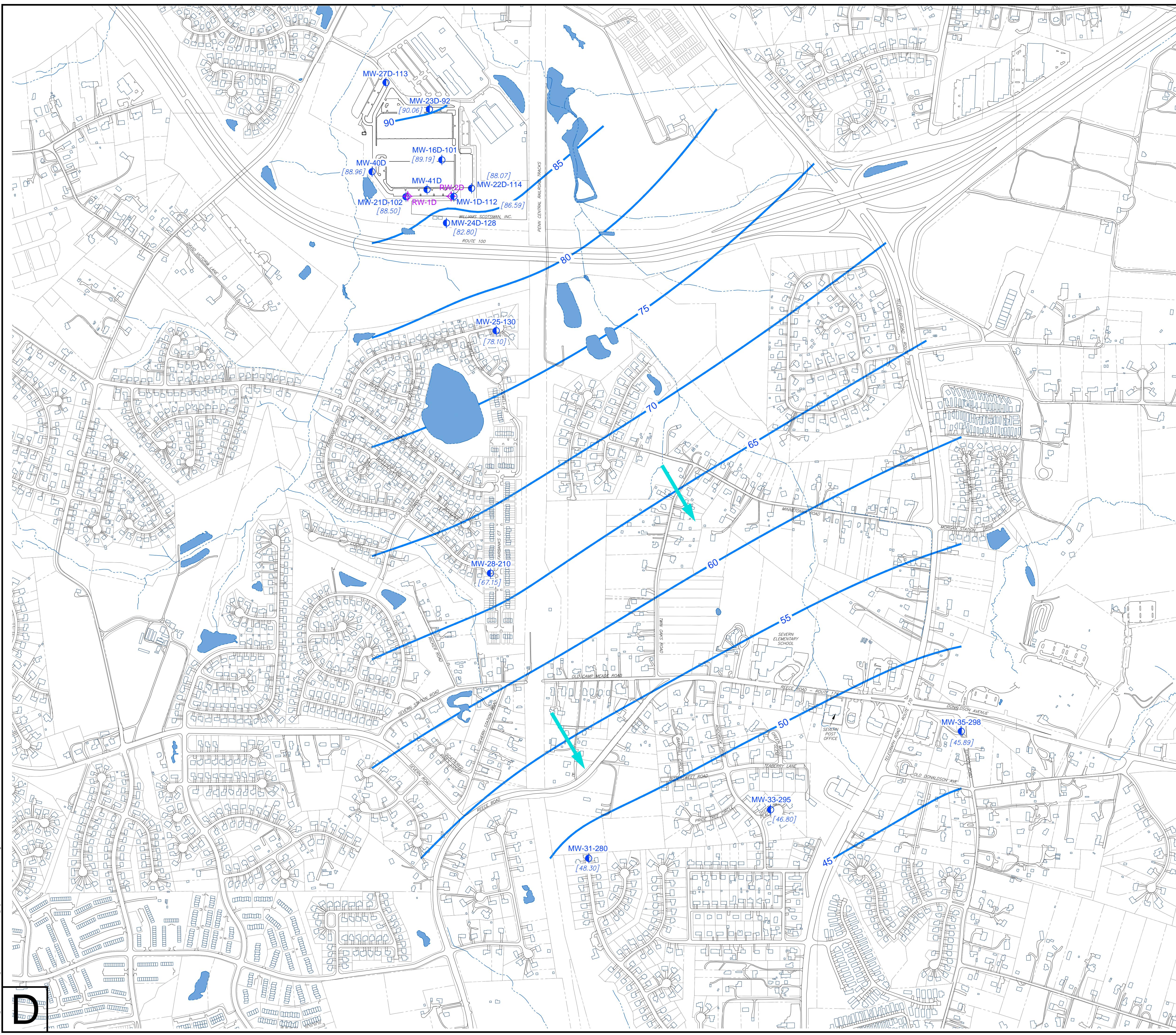
WSP | PARSONS BRINCKERHOFF
WSP USA Corp., Technology Drive, Suite 300
Herndon, Virginia 20171
www.wspgroup.com/us

D

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

FIGURE 1

Drawing Number
314V0390-015



400 200 0 400 800
SCALE, FEET

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

OFFSITE GROUNDWATER ELEVATION CONTOUR MAP - DECEMBER 2016

FORMER KOP-FLEX FACILITY SITE
HANOVER, MARYLAND

PREPARED FOR

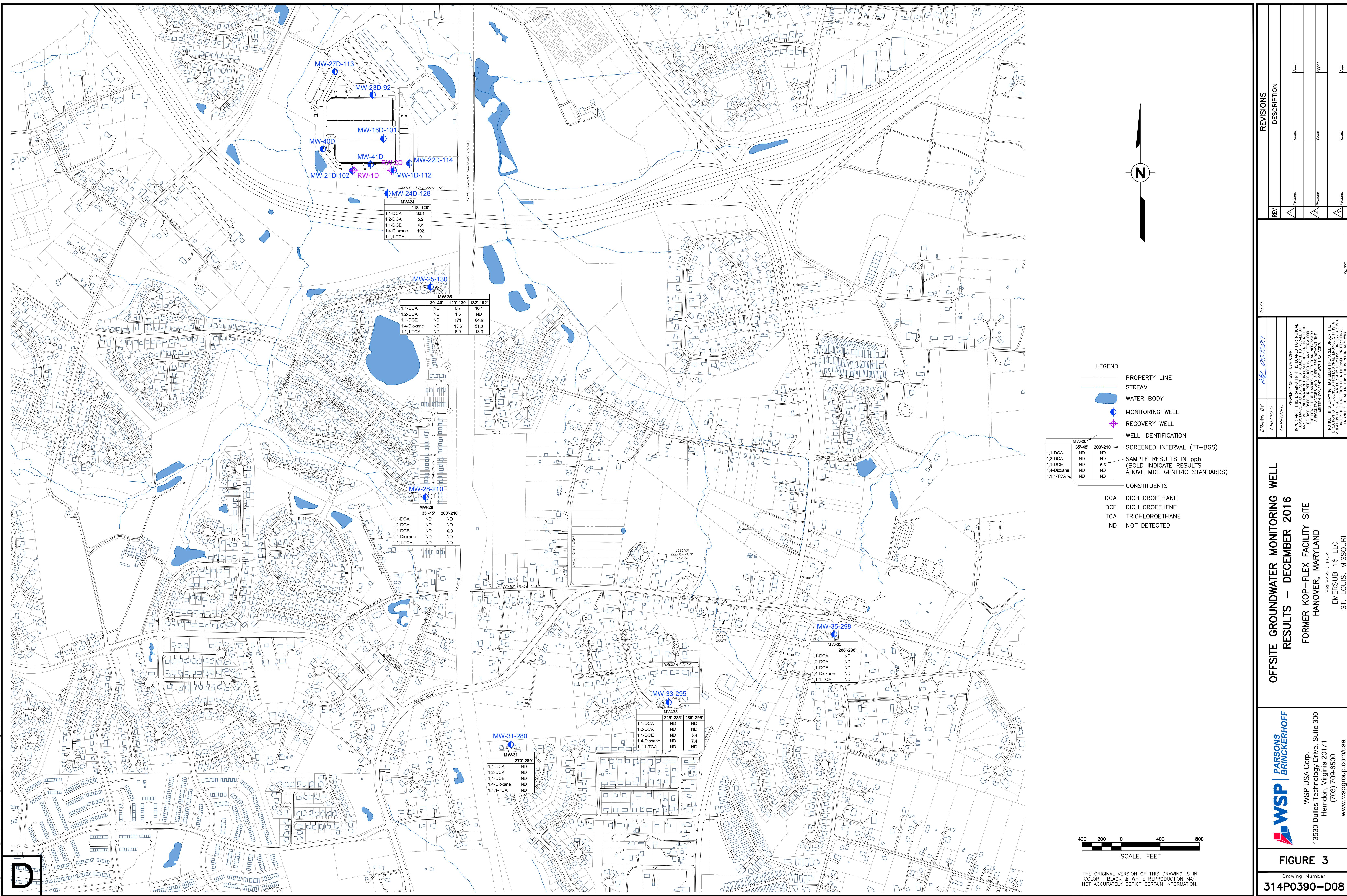
EMERSUB 16 LLC
ST. LOUIS, MISSOURI



WSP USA Corp.
13530 Dulles Technology Drive, Suite 300
Herndon, Virginia 20171
(703) 709-6500
www.wsppgroup.com/us

FIGURE 2
Drawing Number
314P0390-D04

REV		DESCRIPTION	
△	Revised	△	App:
△	Revised	△	App:
△	Revised	△	App:
△	Revised	△	App:
		DATE	



Tables

Table 1

**Offsite 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)
MW-24D-128	129.1	46.3	82.80	128.5	118.5-128.5	124.5-127
MW-25-40	130.6	14.61	115.99	40	30-40	35-37.5
MW-25-130	130.5	52.4	78.10	130	120-130	125-127.5
MW-25-190	130.5	58.64	71.86	190	180-190	185-187.5
MW-28-45	150.5	26.8	123.70	45	35-45	40-42.5
MW-28-210	150.5	83.35	67.15	210	200-210	205-207.5
MW-31-280	162.5	114.2	48.30	280	270-280	275-277.5
MW-33-235	178.6	131.79	46.81	235	225-235	230-232.5
MW-33-295	178.3	131.5	46.80	295	285-295	290-292.5
MW-35-298	177.8	131.91	45.89	298	288-298	293-295.5

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

Table 2

Quarterly Offsite Monitoring Well Sample Results (a)
Former Kop-Flex Facility Site
Hanover, Maryland
December 2016

Analyte (b)	Groundwater Quality Criteria (ug/L) (c)	MW-24D <u>12/8/2016</u>	MW-100 (e) <u>12/8/2016</u>	MW-25-40 <u>12/8/2016</u>	MW-25-130 <u>12/8/2016</u>	MW-25-190 <u>12/8/2016</u>	MW-28-45 <u>12/8/2016</u>	MW-28-210 <u>12/8/2016</u>	MW-31-280 <u>12/8/2016</u>	MW-33-235 <u>12/8/2016</u>	MW-33-295 <u>12/8/2016</u>	MW-35-298 <u>12/8/2016</u>
Benzene	5	5.0 U	5.0 U	1.0 U	3.2	7.1	4.3	1.0 U	1.8	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	90	36.1	37.1	1.0 U	6.7	16.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5	5.2	5.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	701	751	1.0 U	171	64.6	1.0 U	6.3	1.0 U	1.0 U	5.4	1.0 U
1,4-Dioxane (p-Dioxane)	6.7 (d)	192	195	2.0 U	13.6	51.3	2.0 U	2.0 U	2.0 U	2.0 U	7.4	2.0 U
1,1,1-Trichloroethane	200	9	10	1.0 U	6.9	13.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 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 ($\mu\text{g/l}$)

c/ Groundwater Quality Criteria sources:

RSLs: [http://www.mde.maryland.gov/assets/document/Final%20Update%20No%202.1%20dated%205-20-08\(1\).pdf](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-100 is a duplicate of MW-24D

Enclosure A – Certified Laboratory Report for November 2016 Residential Well Samples



ACCUTEST

New Jersey

11/18/16

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION,
VERIFICATION, TESTING AND CERTIFICATION COMPANY.



e-Hardcopy 2.0
Automated Report

Technical Report for

WSP

Kop-Flex, Hanover, MD

31400389-3

SGS Accutest Job Number: JC31105

Sampling Date: 11/03/16



Report to:

**WSP
11190 Sunrise Valley Drive Suite 300
Reston, VA 20190
eric.johnson@wspgroup.com**

ATTN: Eric Johnson

Total number of pages in report: 39



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Daniel Axelrod 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: JC31105-1: RW-1227OCM-110316-F	6
3.2: JC31105-2: RW-1227OCM-110316	10
3.3: JC31105-3: RW-1409BS-110316	14
3.4: JC31105-4: RW-1409BS-110316-F	18
3.5: JC31105-5: RW-7924GMG-110316	22
3.6: JC31105-6: RW-1405PTC-110316-F	26
3.7: JC31105-7: RW-1405PTC-110316	30
3.8: JC31105-8: TRIP BLANK	34
Section 4: Misc. Forms	37
4.1: Chain of Custody	38

Sample Summary

WSP

Job No: JC31105

Kop-Flex, Hanover, MD
Project No: 31400389-3

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
JC31105-1	11/03/16	10:20 MR/M	1/04/16	AQ Water	RW-1227OCM-110316-F
JC31105-2	11/03/16	10:25 MR/M	1/04/16	AQ Water	RW-1227OCM-110316
JC31105-3	11/03/16	11:25 MR/M	1/04/16	AQ Water	RW-1409BS-110316
JC31105-4	11/03/16	11:30 MR/M	1/04/16	AQ Water	RW-1409BS-110316-F
JC31105-5	11/03/16	15:30 MR/M	1/04/16	AQ Water	RW-7924GMG-110316
JC31105-6	11/03/16	17:00 MR/M	1/04/16	AQ Water	RW-1405PTC-110316-F
JC31105-7	11/03/16	17:10 MR/M	1/04/16	AQ Water	RW-1405PTC-110316
JC31105-8	11/03/16	17:10 MR/M	1/04/16	AQ Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JC31105
Account: WSP
Project: Kop-Flex, Hanover, MD
Collected: 11/03/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JC31105-1 RW-1227OCM-110316-F

Chloroform ^a	0.095 J	0.50	0.087	ug/l	EPA 524.2 REV 4.1
1,1-Dichloroethane ^a	0.16 J	0.50	0.064	ug/l	EPA 524.2 REV 4.1
1,1,1-Trichloroethane ^a	0.42 J	0.50	0.065	ug/l	EPA 524.2 REV 4.1
1,4-Dioxane ^b	2.7	0.40	0.33	ug/l	SW846 8260C BY SIM

JC31105-2 RW-1227OCM-110316

1,1-Dichloroethane ^a	0.19 J	0.50	0.064	ug/l	EPA 524.2 REV 4.1
1,1-Dichloroethylene ^a	8.8	0.50	0.18	ug/l	EPA 524.2 REV 4.1
1,1,1-Trichloroethane ^a	0.48 J	0.50	0.065	ug/l	EPA 524.2 REV 4.1
1,4-Dioxane ^b	2.9	0.40	0.33	ug/l	SW846 8260C BY SIM

JC31105-3 RW-1409BS-110316

No hits reported in this sample.

JC31105-4 RW-1409BS-110316-F

No hits reported in this sample.

JC31105-5 RW-7924GMG-110316

No hits reported in this sample.

JC31105-6 RW-1405PTC-110316-F

No hits reported in this sample.

JC31105-7 RW-1405PTC-110316

No hits reported in this sample.

JC31105-8 TRIP BLANK

No hits reported in this sample.

(a) EPA 524.2 is not a certified method for non-potable water samples.

(b) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

3

Client Sample ID: RW-1227OCM-110316-F**Lab Sample ID:** JC31105-1**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106283.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	0.095	0.50	0.087	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	0.16	0.50	0.064	ug/l	J
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-1227OCM-110316-F**Lab Sample ID:** JC31105-1**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	0.42	0.50	0.065	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	97%		78-114%
460-00-4	4-Bromofluorobenzene	86%		77-115%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3-1
3

Client Sample ID: RW-1227OCM-110316-F
Lab Sample ID: JC31105-1
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID: RW-1227OCM-110316-F**Lab Sample ID:** JC31105-1**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** SW846 8260C BY SIM**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153361.D	1	11/07/16	VC	n/a	n/a	V3A6607
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
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123-91-1	1,4-Dioxane	2.7	0.40	0.33	ug/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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17647-74-4	1,4-Dioxane-d8	92%		50-150%
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(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

32
3**Client Sample ID:** RW-1227OCM-110316**Lab Sample ID:** JC31105-2**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106284.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	0.19	0.50	0.064	ug/l	J
75-35-4	1,1-Dichloroethylene	8.8	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RW-1227OCM-110316
Lab Sample ID: JC31105-2
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	0.48	0.50	0.065	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	96%		78-114%
460-00-4	4-Bromofluorobenzene	85%		77-115%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

32
3

Client Sample ID: RW-1227OCM-110316
Lab Sample ID: JC31105-2
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	RW-1227OCM-110316	Date Sampled:	11/03/16
Lab Sample ID:	JC31105-2	Date Received:	11/04/16
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260C BY SIM		
Project:	Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153387.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	2.9	0.40	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-d8	105%		50-150%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

33
3**Client Sample ID:** RW-1409BS-110316**Lab Sample ID:** JC31105-3**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106285.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-1409BS-110316**Lab Sample ID:** JC31105-3**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	97%		78-114%
460-00-4	4-Bromofluorobenzene	85%		77-115%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.3
3

Client Sample ID: RW-1409BS-110316
Lab Sample ID: JC31105-3
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33
3

Client Sample ID: RW-1409BS-110316
Lab Sample ID: JC31105-3
Matrix: AQ - Water
Method: SW846 8260C BY SIM
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153388.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume
Run #1 5.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
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123-91-1	1,4-Dioxane	ND	0.40	0.33	ug/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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17647-74-4	1,4-Dioxane-d8	109%		50-150%
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(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

34
3**Client Sample ID:** RW-1409BS-110316-F**Lab Sample ID:** JC31105-4**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106276.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-1409BS-110316-F**Lab Sample ID:** JC31105-4**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	99%		78-114%
460-00-4	4-Bromofluorobenzene	90%		77-115%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3-4
3

Client Sample ID: RW-1409BS-110316-F
Lab Sample ID: JC31105-4
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-1409BS-110316-F**Lab Sample ID:** JC31105-4**Matrix:** AQ - Water**Method:** SW846 8260C BY SIM**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153389.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
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123-91-1	1,4-Dioxane	ND	0.40	0.33	ug/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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17647-74-4	1,4-Dioxane-d8	88%		50-150%
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(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

35

3

Client Sample ID: RW-7924GMG-110316**Lab Sample ID:** JC31105-5**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	1B106277.D	1	11/08/16	BK	n/a	n/a	V1B5048

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromo-chloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromo-chloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-7924GMG-110316**Lab Sample ID:** JC31105-5**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	96%		78-114%
460-00-4	4-Bromofluorobenzene	88%		77-115%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.5
3**Client Sample ID:** RW-7924GMG-110316**Lab Sample ID:** JC31105-5**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

35
3**Client Sample ID:** RW-7924GMG-110316**Lab Sample ID:** JC31105-5**Matrix:** AQ - Water**Method:** SW846 8260C BY SIM**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153390.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
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123-91-1	1,4-Dioxane	ND	0.40	0.33	ug/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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17647-74-4	1,4-Dioxane-d8	108%		50-150%
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(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

3.6
3

Client Sample ID: RW-1405PTC-110316-F
Lab Sample ID: JC31105-6
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

Run #1 ^a	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	1B106278.D	1	11/08/16	BK	n/a	n/a	V1B5048

Purge Volume	
Run #1	5.0 ml
Run #2	

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromo(chloromethane)	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RW-1405PTC-110316-F
Lab Sample ID: JC31105-6
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	100%		78-114%
460-00-4	4-Bromofluorobenzene	91%		77-115%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.6
3

Client Sample ID: RW-1405PTC-110316-F
Lab Sample ID: JC31105-6
Matrix: AQ - Water
Method: EPA 524.2 REV 4.1
Project: Kop-Flex, Hanover, MD

Date Sampled: 11/03/16
Date Received: 11/04/16
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.6
3

Client Sample ID:	RW-1405PTC-110316-F	Date Sampled:	11/03/16
Lab Sample ID:	JC31105-6	Date Received:	11/04/16
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260C BY SIM		
Project:	Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153391.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.40	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17647-74-4	1,4-Dioxane-d8	98%		50-150%

(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

37
3**Client Sample ID:** RW-1405PTC-110316**Lab Sample ID:** JC31105-7**Date Sampled:** 11/03/16**Matrix:** AQ - Water**Date Received:** 11/04/16**Method:** EPA 524.2 REV 4.1**Percent Solids:** n/a**Project:** Kop-Flex, Hanover, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106281.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis**Client Sample ID:** RW-1405PTC-110316**Lab Sample ID:** JC31105-7**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	97%		78-114%
460-00-4	4-Bromofluorobenzene	85%		77-115%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

37
3**Client Sample ID:** RW-1405PTC-110316**Lab Sample ID:** JC31105-7**Matrix:** AQ - Water**Method:** EPA 524.2 REV 4.1**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a**VOA List**

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

37
3**Client Sample ID:** RW-1405PTC-110316**Lab Sample ID:** JC31105-7**Matrix:** AQ - Water**Method:** SW846 8260C BY SIM**Project:** Kop-Flex, Hanover, MD**Date Sampled:** 11/03/16**Date Received:** 11/04/16**Percent Solids:** n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3A153392.D	1	11/08/16	VC	n/a	n/a	V3A6608
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
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123-91-1	1,4-Dioxane	ND	0.40	0.33	ug/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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17647-74-4	1,4-Dioxane-d8	111%		50-150%
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(a) (pH= 7) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

38

3

Client Sample ID:	TRIP BLANK	Date Sampled:	11/03/16
Lab Sample ID:	JC31105-8	Date Received:	11/04/16
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1B106282.D	1	11/08/16	BK	n/a	n/a	V1B5048
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	0.53	ug/l	
78-93-3	2-Butanone	ND	5.0	0.59	ug/l	
71-43-2	Benzene	ND	0.50	0.051	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.070	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.065	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.059	ug/l	
75-25-2	Bromoform	ND	0.50	0.083	ug/l	
74-83-9	Bromomethane	ND	0.50	0.062	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.055	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.062	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.068	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.055	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.055	ug/l	
75-00-3	Chloroethane	ND	0.50	0.076	ug/l	
67-66-3	Chloroform	ND	0.50	0.087	ug/l	
74-87-3	Chloromethane	ND	0.50	0.18	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.057	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.067	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.073	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.064	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.18	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.089	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.073	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.047	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.074	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.058	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.12	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.078	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.051	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.11	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.055	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	11/03/16
Lab Sample ID:	JC31105-8	Date Received:	11/04/16
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.056	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.048	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.090	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.11	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.078	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.062	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.066	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.079	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.25	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.062	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.053	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.076	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.24	ug/l	
91-20-3	Naphthalene	ND	0.50	0.062	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.081	ug/l	
100-42-5	Styrene	ND	0.50	0.094	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.073	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.065	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.091	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.11	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.063	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.074	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.051	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.052	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.049	ug/l	
108-88-3	Toluene	ND	0.50	0.054	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.079	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.079	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.082	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.060	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	96%		78-114%
460-00-4	4-Bromofluorobenzene	85%		77-115%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.8
3

Client Sample ID:	TRIP BLANK	Date Sampled:	11/03/16
Lab Sample ID:	JC31105-8	Date Received:	11/04/16
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	EPA 524.2 REV 4.1		
Project:	Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
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(a) EPA 524.2 is not a certified method for non-potable water samples.

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

WW, WTB

CHAIN-OF-CUSTODY RECORD							
				6780 9738 6342			
				Requested Analyses & Preservatives			
Project Name Kop-Flex	WSP Parsons Brinckerhoff Contact Name Eric Johnson	No. 004480 WSP PARSONS BRINCKERHOFF					
Project Location Hanover, MD	WSP Parsons Brinckerhoff Contact E-mail Eric.Johnson@wspgroup.com	Laboratory Name & Location SGS Accutest Dayton, NJ					
Project Number & Task 31400389 - 3	WSP Parsons Brinckerhoff Contact Phone 703 - 709 - 6500	Laboratory Project Manager Megan Patel Daniel Axelrod					
Sampler(s) Name(s) Matt Richardson	Sampler(s) Signature(s) 	Requested Turn-Around-Time <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> _____ HR					
Sampler(s) Name(s) Michael Charman		Sample Comments V443					
Sample Identification	Matrix	Collection Start* Date	Collection Stop* Date	Number of Containers			
1 RW-12270CM-110316-F	Aq	11/3 1020		6 X X			
2 RW-12270CM-110316	Aq	11/3 1025		6 X X			
3 RW-1409BS-110316	Aq	11/3 1125		6 X X			
4 RW-1409BS-110316-F	Aq	11/3 1130		6 X X			
5 RW-7924GMG-110316	Aq	11/3 1530		8 X X *			
6 RW-1405PTC-110316-F	Aq	11/3 1700		6 X X	* VOA ac vial 3/11/16		
7 RW-1405PTC-110316	Aq	11/3 1710		6 X X	* UP 7 11/4/16		
8 TRIP BLANK	Aq	- -	*	4 X X	Lab Prepared		
INITIAL ASSESSMENT <i>PF3A</i>							
LABEL VERIFICATION <i>JL</i>							
Relinquished By (Signature) 	Date 11/3/16	Time 1900	Received By (Signature) FedEx	Date 11/3/16	Time 1900	Shipment Method FedEx Express	Tracking Number(s) 6780 9738 6342
Relinquished By (Signature) 	Date 11-4-16	Time 9:30	Received By (Signature) 	Date 11/4/16	Time 0930	Number of Packages 1	Custody Seal Number(s) 3849
*Use stop time/date for composite and/or air samples; use only start time/date for all other samples.							
<i>CLIENT SIDE</i>							

Matrix: Aq = Aqueous, S = Soil, SE = Sediment, A = Air, M = M

1.26 170

JC31105: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC31105 **Client:** _____ **Project:** _____
Date / Time Received: 11/4/2016 9:30:00 AM **Delivery Method:** _____
Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (1.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

Cooler Security		Y or N	Y or N	Sample Integrity - Documentation		Y or N	
1. Custody Seals Present:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cooler Temperature		Y or N		Sample Integrity - Condition		Y or N	
1. Temp criteria achieved:		<input checked="" type="checkbox"/>		1. Sample labels present on bottles:		<input checked="" type="checkbox"/>	
2. Cooler temp verification:		IR Gun		2. Container labeling complete:		<input checked="" type="checkbox"/>	
3. Cooler media:		Ice (Bag)		3. Sample container label / COC agree:		<input checked="" type="checkbox"/>	
4. No. Coolers:		1		Sample Integrity - Instructions		Y or N N/A	
Quality Control Preservation		Y or N	N/A	1. Analysis requested is clear:		<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. Trip Blank present / cooler:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Bottles received for unspecified tests		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Sufficient volume recvd for analysis:		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Compositing instructions clear:		<input type="checkbox"/>	<input type="checkbox"/>
4. VOCs headspace free:		<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Filtering instructions clear:		<input type="checkbox"/>	<input type="checkbox"/>

Comments

4.1

4

JC31105: Chain of Custody

Page 2 of 2

Enclosure B – Certified Laboratory Report for Offsite Monitoring Well Samples (December 2016)

December 15, 2016

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

RE: Project: FORMER KOP-FLEX OFFSITE
Pace Project No.: 92322858

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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORMER KOP-FLEX OFFSITE
Pace Project No.: 92322858

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92322858001	MW-24D	Water	12/08/16 10:10	12/09/16 10:07
92322858002	MW-100	Water	12/08/16 09:30	12/09/16 10:07
92322858003	MW-28-45	Water	12/08/16 12:25	12/09/16 10:07
92322858004	MW-28-210	Water	12/08/16 12:55	12/09/16 10:07
92322858005	MW-33-235	Water	12/08/16 13:25	12/09/16 10:07
92322858006	MW-33-295	Water	12/08/16 13:50	12/09/16 10:07
92322858007	MW-31-280	Water	12/08/16 14:15	12/09/16 10:07
92322858008	MW-35-298	Water	12/08/16 14:45	12/09/16 10:07
92322858009	MW-25-40	Water	12/08/16 15:20	12/09/16 10:07
92322858010	MW-25-190	Water	12/08/16 15:40	12/09/16 10:07
92322858011	MW-25-130	Water	12/08/16 16:10	12/09/16 10:07
92322858012	TRIP BLANK	Water	12/08/16 00:00	12/09/16 10:07

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SAMPLE ANALYTE COUNT

Project: FORMER KOP-FLEX OFFSITE
Pace Project No.: 92322858

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92322858001	MW-24D	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858002	MW-100	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858003	MW-28-45	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858004	MW-28-210	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858005	MW-33-235	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858006	MW-33-295	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858007	MW-31-280	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858008	MW-35-298	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858009	MW-25-40	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858010	MW-25-190	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858011	MW-25-130	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C
92322858012	TRIP BLANK	EPA 8260 EPA 8260B Mod.	ZDO DLK	64 3	PASI-C

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-24D	Lab ID: 92322858001	Collected: 12/08/16 10:10	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	125	5		12/14/16 01:58	67-64-1	
Benzene	ND	ug/L	5.0	5		12/14/16 01:58	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		12/14/16 01:58	108-86-1	
Bromoform	ND	ug/L	5.0	5		12/14/16 01:58	74-97-5	
Bromochloromethane	ND	ug/L	5.0	5		12/14/16 01:58	75-27-4	
Bromodichloromethane	ND	ug/L	5.0	5		12/14/16 01:58	75-25-2	
Bromomethane	ND	ug/L	10.0	5		12/14/16 01:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		12/14/16 01:58	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	5		12/14/16 01:58	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	108-90-7	
Chloroethane	ND	ug/L	5.0	5		12/14/16 01:58	75-00-3	
Chloroform	ND	ug/L	5.0	5		12/14/16 01:58	67-66-3	
Chloromethane	ND	ug/L	5.0	5		12/14/16 01:58	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 01:58	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 01:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	5		12/14/16 01:58	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		12/14/16 01:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		12/14/16 01:58	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		12/14/16 01:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		12/14/16 01:58	75-71-8	
1,1-Dichloroethane	36.1	ug/L	5.0	5		12/14/16 01:58	75-34-3	
1,2-Dichloroethane	5.2	ug/L	5.0	5		12/14/16 01:58	107-06-2	
1,1-Dichloroethene	701	ug/L	5.0	5		12/14/16 01:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 01:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 01:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 01:58	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		12/14/16 01:58	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 01:58	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		12/14/16 01:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 01:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 01:58	10061-02-6	
Diisopropyl ether	ND	ug/L	5.0	5		12/14/16 01:58	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	750	5		12/14/16 01:58	123-91-1	L3
Ethylbenzene	ND	ug/L	5.0	5		12/14/16 01:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		12/14/16 01:58	87-68-3	
2-Hexanone	ND	ug/L	25.0	5		12/14/16 01:58	591-78-6	
p-Isopropyltoluene	ND	ug/L	5.0	5		12/14/16 01:58	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		12/14/16 01:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		12/14/16 01:58	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		12/14/16 01:58	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		12/14/16 01:58	91-20-3	
Styrene	ND	ug/L	5.0	5		12/14/16 01:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 01:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 01:58	79-34-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-24D	Lab ID: 92322858001	Collected: 12/08/16 10:10	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	5.0	5		12/14/16 01:58	127-18-4	
Toluene	ND	ug/L	5.0	5		12/14/16 01:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 01:58	120-82-1	
1,1,1-Trichloroethane	9.0	ug/L	5.0	5		12/14/16 01:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		12/14/16 01:58	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		12/14/16 01:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		12/14/16 01:58	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	5.0	5		12/14/16 01:58	96-18-4	
Vinyl acetate	ND	ug/L	10.0	5		12/14/16 01:58	108-05-4	
Vinyl chloride	ND	ug/L	5.0	5		12/14/16 01:58	75-01-4	
Xylene (Total)	ND	ug/L	5.0	5		12/14/16 01:58	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		12/14/16 01:58	179601-23-1	
o-Xylene	ND	ug/L	5.0	5		12/14/16 01:58	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	5		12/14/16 01:58	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	5		12/14/16 01:58	17060-07-0	
Toluene-d8 (S)	105	%	70-130	5		12/14/16 01:58	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	192	ug/L	10.0	5		12/13/16 15:49	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	50-150	5		12/13/16 15:49	17060-07-0	
Toluene-d8 (S)	79	%	50-150	5		12/13/16 15:49	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-100	Lab ID: 92322858002	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	125	5		12/14/16 18:03	67-64-1	
Benzene	ND	ug/L	5.0	5		12/14/16 18:03	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		12/14/16 18:03	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		12/14/16 18:03	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	5		12/14/16 18:03	75-27-4	
Bromoform	ND	ug/L	5.0	5		12/14/16 18:03	75-25-2	
Bromomethane	ND	ug/L	10.0	5		12/14/16 18:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	5		12/14/16 18:03	78-93-3	
Carbon tetrachloride	ND	ug/L	5.0	5		12/14/16 18:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	108-90-7	
Chloroethane	ND	ug/L	5.0	5		12/14/16 18:03	75-00-3	
Chloroform	ND	ug/L	5.0	5		12/14/16 18:03	67-66-3	
Chloromethane	ND	ug/L	5.0	5		12/14/16 18:03	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 18:03	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		12/14/16 18:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	10.0	5		12/14/16 18:03	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		12/14/16 18:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		12/14/16 18:03	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		12/14/16 18:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		12/14/16 18:03	75-71-8	
1,1-Dichloroethane	37.1	ug/L	5.0	5		12/14/16 18:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		12/14/16 18:03	107-06-2	
1,1-Dichloroethene	751	ug/L	5.0	5		12/14/16 18:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 18:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		12/14/16 18:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 18:03	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		12/14/16 18:03	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		12/14/16 18:03	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		12/14/16 18:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 18:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	5		12/14/16 18:03	10061-02-6	
Diisopropyl ether	ND	ug/L	5.0	5		12/14/16 18:03	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	750	5		12/14/16 18:03	123-91-1	L1
Ethylbenzene	ND	ug/L	5.0	5		12/14/16 18:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	5		12/14/16 18:03	87-68-3	
2-Hexanone	ND	ug/L	25.0	5		12/14/16 18:03	591-78-6	
p-Isopropyltoluene	ND	ug/L	5.0	5		12/14/16 18:03	99-87-6	
Methylene Chloride	ND	ug/L	10.0	5		12/14/16 18:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		12/14/16 18:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		12/14/16 18:03	1634-04-4	
Naphthalene	ND	ug/L	5.0	5		12/14/16 18:03	91-20-3	
Styrene	ND	ug/L	5.0	5		12/14/16 18:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 18:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		12/14/16 18:03	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-100	Lab ID: 92322858002	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	5.0	5		12/14/16 18:03	127-18-4	
Toluene	ND	ug/L	5.0	5		12/14/16 18:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		12/14/16 18:03	120-82-1	
1,1,1-Trichloroethane	10.0	ug/L	5.0	5		12/14/16 18:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	5		12/14/16 18:03	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		12/14/16 18:03	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	5		12/14/16 18:03	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	5.0	5		12/14/16 18:03	96-18-4	
Vinyl acetate	ND	ug/L	10.0	5		12/14/16 18:03	108-05-4	
Vinyl chloride	ND	ug/L	5.0	5		12/14/16 18:03	75-01-4	
Xylene (Total)	ND	ug/L	5.0	5		12/14/16 18:03	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		12/14/16 18:03	179601-23-1	
o-Xylene	ND	ug/L	5.0	5		12/14/16 18:03	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	5		12/14/16 18:03	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	5		12/14/16 18:03	17060-07-0	
Toluene-d8 (S)	106	%	70-130	5		12/14/16 18:03	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	195	ug/L	5.0	2.5		12/13/16 14:34	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 02:18	17060-07-0	
Toluene-d8 (S)	77	%	50-150	1		12/13/16 02:18	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-28-45	Lab ID: 92322858003	Collected: 12/08/16 12:25	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 05:29	67-64-1	
Benzene	4.3	ug/L	1.0	1		12/13/16 05:29	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 05:29	108-86-1	
Bromoform	ND	ug/L	1.0	1		12/13/16 05:29	74-97-5	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 05:29	75-27-4	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 05:29	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 05:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 05:29	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 05:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 05:29	75-00-3	M1
Chloroform	ND	ug/L	1.0	1		12/13/16 05:29	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 05:29	74-87-3	M1
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 05:29	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 05:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 05:29	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 05:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 05:29	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 05:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 05:29	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 05:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 05:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 05:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 05:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 05:29	156-60-5	M1
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 05:29	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 05:29	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 05:29	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 05:29	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 05:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 05:29	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 05:29	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 05:29	123-91-1	L3,M0, R1
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 05:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 05:29	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 05:29	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 05:29	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 05:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 05:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 05:29	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 05:29	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 05:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 05:29	630-20-6	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-28-45	Lab ID: 92322858003	Collected: 12/08/16 12:25	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							
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 05:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/13/16 05:29	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 05:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 05:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 05:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 05:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 05:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 05:29	75-69-4	M1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		12/13/16 05:29	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 05:29	108-05-4	M1
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 05:29	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 05:29	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 05:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 05:29	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		12/13/16 05:29	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		12/13/16 05:29	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 05:29	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 05:06	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	82	%	50-150	1		12/13/16 05:06	17060-07-0	
Toluene-d8 (S)	77	%	50-150	1		12/13/16 05:06	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-28-210	Lab ID: 92322858004	Collected: 12/08/16 12:55	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 00:49	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 00:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 00:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 00:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 00:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 00:49	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 00:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 00:49	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 00:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 00:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 00:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 00:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 00:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 00:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 00:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 00:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 00:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 00:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 00:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 00:49	107-06-2	
1,1-Dichloroethene	6.3	ug/L	1.0	1		12/13/16 00:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 00:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 00:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 00:49	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 00:49	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 00:49	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 00:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 00:49	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 00:49	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 00:49	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 00:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 00:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 00:49	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 00:49	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 00:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 00:49	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-28-210	Lab ID: 92322858004	Collected: 12/08/16 12:55	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 00:49	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 00:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 00:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 00:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 00:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 00:49	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 00:49	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 00:49	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 00:49	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 00:49	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 00:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 00:49	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	103	%	70-130	1		12/13/16 00:49	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		12/13/16 00:49	17060-07-0	
Toluene-d8 (S)	109	%	70-130	1		12/13/16 00:49	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 16:08	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	85	%	50-150	1		12/13/16 16:08	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 16:08	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-33-235	Lab ID: 92322858005	Collected: 12/08/16 13:25	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 01:59	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 01:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 01:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 01:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 01:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 01:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 01:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 01:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 01:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 01:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 01:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 01:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 01:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 01:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 01:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 01:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 01:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 01:59	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 01:59	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 01:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 01:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 01:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 01:59	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 01:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 01:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 01:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 01:59	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 01:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:59	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-33-235	Lab ID: 92322858005	Collected: 12/08/16 13:25	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 01:59	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 01:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 01:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 01:59	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 01:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 01:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 01:59	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 01:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 01:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 01:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		12/13/16 01:59	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/13/16 01:59	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 01:59	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 02:55	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 02:55	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 02:55	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-33-295	Lab ID: 92322858006	Collected: 12/08/16 13:50	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 01:07	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 01:07	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 01:07	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 01:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 01:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 01:07	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 01:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 01:07	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 01:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 01:07	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 01:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 01:07	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:07	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:07	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 01:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 01:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 01:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 01:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 01:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:07	107-06-2	
1,1-Dichloroethene	5.4	ug/L	1.0	1		12/13/16 01:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:07	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:07	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:07	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:07	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:07	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 01:07	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 01:07	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 01:07	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 01:07	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 01:07	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 01:07	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 01:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 01:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 01:07	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 01:07	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 01:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:07	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-33-295	Lab ID: 92322858006	Collected: 12/08/16 13:50	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 01:07	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 01:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:07	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 01:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 01:07	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 01:07	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 01:07	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 01:07	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 01:07	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 01:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 01:07	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 01:07	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130	1		12/13/16 01:07	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 01:07	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	7.4	ug/L	2.0	1		12/13/16 03:14	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	50-150	1		12/13/16 03:14	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 03:14	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-31-280	Lab ID: 92322858007	Collected: 12/08/16 14:15	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 02:17	67-64-1	
Benzene	1.8	ug/L	1.0	1		12/13/16 02:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 02:17	108-86-1	
Bromoform	ND	ug/L	1.0	1		12/13/16 02:17	74-97-5	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 02:17	75-27-4	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 02:17	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 02:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 02:17	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 02:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 02:17	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 02:17	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 02:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 02:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 02:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 02:17	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 02:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 02:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 02:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 02:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:17	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 02:17	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 02:17	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 02:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 02:17	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 02:17	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 02:17	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 02:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 02:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 02:17	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 02:17	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 02:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:17	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-31-280	Lab ID: 92322858007	Collected: 12/08/16 14:15	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 02:17	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 02:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 02:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 02:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 02:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 02:17	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 02:17	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 02:17	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 02:17	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 02:17	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 02:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 02:17	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 02:17	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-130	1		12/13/16 02:17	17060-07-0	
Toluene-d8 (S)	108	%	70-130	1		12/13/16 02:17	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 03:33	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 03:33	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 03:33	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-35-298	Lab ID: 92322858008	Collected: 12/08/16 14:45	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		12/13/16 01:42	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 01:42	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 01:42	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 01:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 01:42	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 01:42	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 01:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 01:42	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 01:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 01:42	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 01:42	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 01:42	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:42	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:42	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 01:42	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 01:42	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 01:42	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 01:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 01:42	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:42	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 01:42	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 01:42	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 01:42	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 01:42	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 01:42	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 01:42	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 01:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 01:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 01:42	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 01:42	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 01:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:42	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-35-298	Lab ID: 92322858008	Collected: 12/08/16 14:45	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		12/13/16 01:42	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 01:42	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 01:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 01:42	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 01:42	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 01:42	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 01:42	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 01:42	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 01:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 01:42	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	101	%	70-130	1		12/13/16 01:42	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130	1		12/13/16 01:42	17060-07-0	
Toluene-d8 (S)	110	%	70-130	1		12/13/16 01:42	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 03:52	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	85	%	50-150	1		12/13/16 03:52	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 03:52	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-40	Lab ID: 92322858009	Collected: 12/08/16 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		12/13/16 01:24	67-64-1	
Benzene	ND	ug/L	1.0	1		12/13/16 01:24	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 01:24	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 01:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 01:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		12/13/16 01:24	75-25-2	
Bromomethane	ND	ug/L	2.0	1		12/13/16 01:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 01:24	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 01:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 01:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 01:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 01:24	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:24	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 01:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 01:24	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 01:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 01:24	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 01:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 01:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 01:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 01:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:24	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:24	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 01:24	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 01:24	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 01:24	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 01:24	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 01:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 01:24	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 01:24	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 01:24	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 01:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 01:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 01:24	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 01:24	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 01:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 01:24	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-40	Lab ID: 92322858009	Collected: 12/08/16 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		12/13/16 01:24	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 01:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 01:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 01:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 01:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 01:24	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 01:24	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 01:24	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 01:24	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 01:24	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 01:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 01:24	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 01:24	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-130	1		12/13/16 01:24	17060-07-0	
Toluene-d8 (S)	107	%	70-130	1		12/13/16 01:24	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 04:10	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	85	%	50-150	1		12/13/16 04:10	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/13/16 04:10	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-190	Lab ID: 92322858010	Collected: 12/08/16 15:40	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 02:52	67-64-1	
Benzene	7.1	ug/L	1.0	1		12/13/16 02:52	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 02:52	108-86-1	
Bromoform	ND	ug/L	1.0	1		12/13/16 02:52	74-97-5	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 02:52	75-27-4	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 02:52	124-48-1	
Bromomethane	ND	ug/L	2.0	1		12/13/16 02:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 02:52	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 02:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 02:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 02:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 02:52	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:52	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 02:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 02:52	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 02:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 02:52	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 02:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 02:52	75-71-8	
1,1-Dichloroethane	16.1	ug/L	1.0	1		12/13/16 02:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/13/16 02:52	107-06-2	
1,1-Dichloroethene	64.6	ug/L	1.0	1		12/13/16 02:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 02:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 02:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 02:52	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 02:52	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 02:52	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 02:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 02:52	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 02:52	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 02:52	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 02:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 02:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 02:52	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 02:52	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 02:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 02:52	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-190	Lab ID: 92322858010	Collected: 12/08/16 15:40	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 02:52	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 02:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 02:52	120-82-1	
1,1,1-Trichloroethane	13.3	ug/L	1.0	1		12/13/16 02:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 02:52	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 02:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 02:52	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 02:52	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 02:52	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 02:52	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 02:52	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 02:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 02:52	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/13/16 02:52	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130	1		12/13/16 02:52	17060-07-0	
Toluene-d8 (S)	110	%	70-130	1		12/13/16 02:52	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	51.3	ug/L	2.0	1		12/13/16 04:29	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%	50-150	1		12/13/16 04:29	17060-07-0	
Toluene-d8 (S)	79	%	50-150	1		12/13/16 04:29	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-130	Lab ID: 92322858011	Collected: 12/08/16 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	25.0	1		12/13/16 15:12	67-64-1	
Benzene	3.2	ug/L	1.0	1		12/13/16 15:12	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/13/16 15:12	108-86-1	
Bromoform	ND	ug/L	1.0	1		12/13/16 15:12	74-97-5	
Bromochloromethane	ND	ug/L	1.0	1		12/13/16 15:12	75-27-4	
Bromodichloromethane	ND	ug/L	1.0	1		12/13/16 15:12	124-48-1	
Bromomethane	ND	ug/L	2.0	1		12/13/16 15:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/13/16 15:12	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/13/16 15:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/13/16 15:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/13/16 15:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/13/16 15:12	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 15:12	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/13/16 15:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/13/16 15:12	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/13/16 15:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/16 15:12	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/13/16 15:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/13/16 15:12	75-71-8	
1,1-Dichloroethane	6.7	ug/L	1.0	1		12/13/16 15:12	75-34-3	
1,2-Dichloroethane	1.5	ug/L	1.0	1		12/13/16 15:12	107-06-2	
1,1-Dichloroethene	171	ug/L	1.0	1		12/13/16 15:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 15:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/13/16 15:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 15:12	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/13/16 15:12	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/13/16 15:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/13/16 15:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 15:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/16 15:12	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/13/16 15:12	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/13/16 15:12	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/13/16 15:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/13/16 15:12	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/13/16 15:12	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/13/16 15:12	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/13/16 15:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/13/16 15:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/13/16 15:12	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/13/16 15:12	91-20-3	
Styrene	ND	ug/L	1.0	1		12/13/16 15:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 15:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/16 15:12	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: MW-25-130	Lab ID: 92322858011	Collected: 12/08/16 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	1.0	1		12/13/16 15:12	127-18-4	
Toluene	ND	ug/L	1.0	1		12/13/16 15:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/16 15:12	120-82-1	
1,1,1-Trichloroethane	6.9	ug/L	1.0	1		12/13/16 15:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/16 15:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/13/16 15:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/13/16 15:12	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/13/16 15:12	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/13/16 15:12	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/13/16 15:12	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/13/16 15:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/13/16 15:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/13/16 15:12	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	104	%	70-130	1		12/13/16 15:12	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-130	1		12/13/16 15:12	17060-07-0	
Toluene-d8 (S)	106	%	70-130	1		12/13/16 15:12	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	13.6	ug/L	2.0	1		12/13/16 04:48	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%	50-150	1		12/13/16 04:48	17060-07-0	
Toluene-d8 (S)	80	%	50-150	1		12/13/16 04:48	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: TRIP BLANK	Lab ID: 92322858012	Collected: 12/08/16 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 14:57	67-64-1	
Benzene	ND	ug/L	1.0	1		12/12/16 14:57	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		12/12/16 14:57	108-86-1	
Bromoform	ND	ug/L	1.0	1		12/12/16 14:57	74-97-5	
Bromochloromethane	ND	ug/L	1.0	1		12/12/16 14:57	75-27-4	
Bromodichloromethane	ND	ug/L	1.0	1		12/12/16 14:57	124-48-1	
Bromomethane	ND	ug/L	2.0	1		12/12/16 14:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		12/12/16 14:57	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		12/12/16 14:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	108-90-7	
Chloroethane	ND	ug/L	1.0	1		12/12/16 14:57	75-00-3	
Chloroform	ND	ug/L	1.0	1		12/12/16 14:57	67-66-3	
Chloromethane	ND	ug/L	1.0	1		12/12/16 14:57	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 14:57	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		12/12/16 14:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		12/12/16 14:57	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		12/12/16 14:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/16 14:57	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		12/12/16 14:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		12/12/16 14:57	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		12/12/16 14:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		12/12/16 14:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/12/16 14:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 14:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/12/16 14:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 14:57	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		12/12/16 14:57	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		12/12/16 14:57	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		12/12/16 14:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 14:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/16 14:57	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		12/12/16 14:57	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		12/12/16 14:57	123-91-1	L3
Ethylbenzene	ND	ug/L	1.0	1		12/12/16 14:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		12/12/16 14:57	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		12/12/16 14:57	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		12/12/16 14:57	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		12/12/16 14:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		12/12/16 14:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		12/12/16 14:57	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		12/12/16 14:57	91-20-3	
Styrene	ND	ug/L	1.0	1		12/12/16 14:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 14:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/16 14:57	79-34-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Sample: TRIP BLANK	Lab ID: 92322858012	Collected: 12/08/16 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 14:57	127-18-4	
Toluene	ND	ug/L	1.0	1		12/12/16 14:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/16 14:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		12/12/16 14:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/16 14:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		12/12/16 14:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		12/12/16 14:57	75-69-4	
1,2,3-Trichloroproppane	ND	ug/L	1.0	1		12/12/16 14:57	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		12/12/16 14:57	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		12/12/16 14:57	75-01-4	
Xylene (Total)	ND	ug/L	1.0	1		12/12/16 14:57	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		12/12/16 14:57	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		12/12/16 14:57	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		12/12/16 14:57	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		12/12/16 14:57	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1		12/12/16 14:57	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 22:52	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	50-150	1		12/12/16 22:52	17060-07-0	
Toluene-d8 (S)	78	%	50-150	1		12/12/16 22:52	2037-26-5	

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch:	340452	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples:	92322858012		

METHOD BLANK: 1888247 Matrix: Water

Associated Lab Samples: 92322858012

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1888247

Matrix: Water

Associated Lab Samples: 92322858012

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

MATRIX SPIKE SAMPLE:	1888249						
Parameter	Units	92322779004	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

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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	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 OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch: 340465 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level

Associated Lab Samples: 92322858004, 92322858005, 92322858006, 92322858007, 92322858008, 92322858009, 92322858010

METHOD BLANK: 1888305 Matrix: Water

Associated Lab Samples: 92322858004, 92322858005, 92322858006, 92322858007, 92322858008, 92322858009, 92322858010

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1888305

Matrix: Water

Associated Lab Samples: 92322858004, 92322858005, 92322858006, 92322858007, 92322858008, 92322858009, 92322858010

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

MATRIX SPIKE SAMPLE:	1888880		92322711006	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Parameter	Units	Result						
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

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

MATRIX SPIKE SAMPLE: 1888880

Parameter	Units	92322711006 Result	Spike	MS	MS	% Rec	Qualifiers
			Conc.	Result	% Rec	Limits	
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	Max	Qualifiers
			Result	RPD	
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 OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch:	340466	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples: 92322858003			

METHOD BLANK: 1888321	Matrix: Water
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Associated Lab Samples: 92322858003

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1888321

Matrix: Water

Associated Lab Samples: 92322858003

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	92322858003		MS		MSD		1888324		% Rec	Limits	RPD	Max
		Result	Spike Conc.	Spike Conc.	MS Result	MSD	MS % Rec	MSD % Rec	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

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	92322858003		MS		MSD		1888324				
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	% Rec	Limits	RPD	Max RPD
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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch:	340602	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples:	92322858011		

METHOD BLANK: 1888927 Matrix: Water

Associated Lab Samples: 92322858011

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1888927

Matrix: Water

Associated Lab Samples: 92322858011

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	92322711011		MS		MSD		MS		MSD		% Rec	Limits	Max RPD	RPD	Qual
		Result	Conc.	Spike	Conc.	MS	Result	MSD	Result	% Rec	MSD					
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-Dichloropropene	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

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	92322711011		MS Spike		MSD Spike		MS Result		MSD Result		% Rec	Max	
		Result	Conc.	Conc.	Result	Conc.	Result	% Rec	Result	% Rec	Result	% Rec	RPD	RPD
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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch:	340638	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples: 92322858001			

METHOD BLANK: 1889287	Matrix: Water
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Associated Lab Samples: 92322858001

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1889287

Matrix: Water

Associated Lab Samples: 92322858001

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	92322711012		MS Spike		MSD Spike		MS Result		MSD Result		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max Qual	
		Result	Conc.	Conc.	Result	Conc.	Result	Result	% Rec	Result	% Rec	Result	% Rec	Result	% Rec	RPD	RPD	RPD	RPD	RPD	RPD
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	800	800	1010	1450	126	181	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	80	80	95.0	96.1	119	120	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	80	80	76.9	80.7	96	101	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	80	80	85.0	82.8	106	103	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1889289		1889290		% Rec	MSD % Rec	Limits	Max	
		92322711012		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				RPD RPD	RPD RPD
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	RPD	RPD
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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch:	340826	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Low Level
Associated Lab Samples: 92322858002			

METHOD BLANK: 1890542	Matrix: Water
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Associated Lab Samples: 92322858002

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

METHOD BLANK: 1890542

Matrix: Water

Associated Lab Samples: 92322858002

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-Dichloropropene	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

MATRIX SPIKE SAMPLE:	1890544						
Parameter	Units	92323179003	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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

MATRIX SPIKE SAMPLE:	1890544						
Parameter	Units	92323179003	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	Dup Result	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 OFFSITE

Pace Project No.: 92322858

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		

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

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without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE
Pace Project No.: 92322858

QC Batch:	340459	Analysis Method:	EPA 8260B Mod.
QC Batch Method:	EPA 8260B Mod.	Analysis Description:	8260 MSV SIM
Associated Lab Samples:	92322858002, 92322858005, 92322858006, 92322858007, 92322858008, 92322858009, 92322858010, 92322858011, 92322858012		

METHOD BLANK: 1888274 Matrix: Water
Associated Lab Samples: 92322858002, 92322858005, 92322858006, 92322858007, 92322858008, 92322858009, 92322858010,
92322858011, 92322858012

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	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max 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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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch: 340460 Analysis Method: EPA 8260B Mod.

QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM

Associated Lab Samples: 92322858003

METHOD BLANK: 1888278 Matrix: Water

Associated Lab Samples: 92322858003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	12/12/16 21:56	
1,2-Dichloroethane-d4 (S)	%	84	50-150	12/12/16 21:56	
Toluene-d8 (S)	%	79	50-150	12/12/16 21:56	

LABORATORY CONTROL SAMPLE: 1888279

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	20.6	103	71-125	
1,2-Dichloroethane-d4 (S)	%			86	50-150	
Toluene-d8 (S)	%			81	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1888280 1888281

Parameter	Units	92322858003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
1,4-Dioxane (p-Dioxane)	ug/L	ND	20	20	20.3	20.8	97	100	50-150	3	30	
1,2-Dichloroethane-d4 (S)	%						82	83	50-150		150	
Toluene-d8 (S)	%						77	78	50-150		150	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

QC Batch: 340600 Analysis Method: EPA 8260B Mod.

QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM

Associated Lab Samples: 92322858001, 92322858004

METHOD BLANK: 1888923 Matrix: Water

Associated Lab Samples: 92322858001, 92322858004

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	

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

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QUALIFIERS

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER KOP-FLEX OFFSITE

Pace Project No.: 92322858

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92322858001	MW-24D	EPA 8260	340638		
92322858002	MW-100	EPA 8260	340826		
92322858003	MW-28-45	EPA 8260	340466		
92322858004	MW-28-210	EPA 8260	340465		
92322858005	MW-33-235	EPA 8260	340465		
92322858006	MW-33-295	EPA 8260	340465		
92322858007	MW-31-280	EPA 8260	340465		
92322858008	MW-35-298	EPA 8260	340465		
92322858009	MW-25-40	EPA 8260	340465		
92322858010	MW-25-190	EPA 8260	340465		
92322858011	MW-25-130	EPA 8260	340602		
92322858012	TRIP BLANK	EPA 8260	340452		
92322858001	MW-24D	EPA 8260B Mod.	340600		
92322858002	MW-100	EPA 8260B Mod.	340459		
92322858003	MW-28-45	EPA 8260B Mod.	340460		
92322858004	MW-28-210	EPA 8260B Mod.	340600		
92322858005	MW-33-235	EPA 8260B Mod.	340459		
92322858006	MW-33-295	EPA 8260B Mod.	340459		
92322858007	MW-31-280	EPA 8260B Mod.	340459		
92322858008	MW-35-298	EPA 8260B Mod.	340459		
92322858009	MW-25-40	EPA 8260B Mod.	340459		
92322858010	MW-25-190	EPA 8260B Mod.	340459		
92322858011	MW-25-130	EPA 8260B Mod.	340459		
92322858012	TRIP BLANK	EPA 8260B Mod.	340459		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt(SCUR)

Document Revised: Sept. 21, 2016
Page 1 of 2
Issuing Authority:
Pace Quality Office

Laboratory receiving samples:

Asheville

Eden

Greenwood

Huntersville

Raleigh

Mechanicsville

WO# : 92322858



Sample Condition Upon Receipt

Client Name:

Project #

Courier:

Commercial

FedEx
 Pace

UPS

USPS
 Other: _____

Custody Seal Present?

Yes

No

Seals Intact?

Yes

No

Date/Initials Person Examining Contents: PLA/164/H

Packing Material:

Bubble Wrap

Bubble Bags

None

Other: _____

Thermometer:

IR Gun ID:

T11603

Type of Ice:

Wet

Blue

None

Samples on ice, cooling process has begun

Correction Factor:

Cooler Temp Corrected (°C): 3.1

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Samples Field Filtered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	8. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Trip Blank Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted:

Date/Time: _____

Comments/Sample

Discrepancy:

Project Manager SCURF Review:

JY

Date: 12/10/16

Project Manager SRF Review:

JY

Date: 12/10/16

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)



Pace Analytical®

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

***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

Call 033322858

Page 2 of 2

Pace Quality Office

Pace Quality Office

WO# : 92322858

EPM · KRC

Due Date: 12/16/16

CLIENT: 92-WSP

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 #



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A
Required Client Information:

Required Client Information:		Required Project Information:		Invoice Information:	
Company:	WSP / Parsons Brinckerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13550 Dulles Technology Drive Suite 300, Herndon, VA 20171	Copy To:		Company Name:	
Email:		Purchase Order #:	3400394	Address:	
Phone:	Fax	Project Name:	Former Kep-Flex Offsite	Pace Quote:	Regulatory Agency
Requested Due Date:		Project #:		Pace Project Manager:	kevin.godwin@pacealabs.com.
				Pace Profile #:	4362-1
				State / Location	MD
					MD

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9, -)	COLLECTED		Preservatives
		START	END	
	Sample Ids must be unique			
1	MW-24D	AQ G 12/9/16 10:00		
2	MW-100	AQ G 12/9/16 10:00		
3	MJ-28-45	AQ G 12/9/16 0930		
4	MW-28-210	AQ G 12/9/16 0930		
5	MW-33-235	AQ G 12/9/16 1325		
6	MJ-33-215	AQ G 12/9/16 1325		
7	MW-31-280	AQ G 12/9/16 1415		
8	MW-35-298	AQ G 12/9/16 1415		
9	MW-25-40	AQ G 12/9/16 1520		
10	MW-25-190	AQ G 12/9/16 1540		
11	MW-25-130	AQ G 12/9/16 1610		
12	MS/MSD-18-0816	AQ G 12/9/16 1625		
ADDITIONAL COMMENTS		RElinquished BY / AFFILIATION		SAMPLE TEMP AT COLLECTION
		DATE	TIME	# OF CONTAINERS
				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)
				MS/MSD of MW-28-45 v01
TEMP in C				
Received on Ice (Y/N)				
Custody Sealed Cooler (Y/N)				
Samples Intact (Y/N)				

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	WSP Parsons Brinckerhoff	Report To:	Wallace, Robert	Attention:	
Address:	13530 Dulles Technology Drive Suite 300, Herndon, VA 20171	Copy To:		Company Name:	
Email:		Purchase Order #:	21400389	Address:	
Phone:	Fax	Project Name:	Former Kop-Flex Offsite	Pace Quote:	
Requested Due Date:		Project #:		Pace Project Manager:	kevin.godwin@pacelabs.com,
		Pace Profile #:	4352-1	State / Location:	MD
				Regulatory Agency:	
				MID:	

Page : 2 Of 1