11190 Sunrise Valley Drive
Suite 300
Reston, VA 20191
Main: 703 709 6500
www.wspgroup.com/usa

May 13, 2015

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. 5
Kop-Flex Voluntary Cleanup Site #31, Hanover, Maryland

Dear Erich:

WSP USA Corp., on behalf of Emerson, is submitting this progress report describing the investigation and remediation activities conducted in the first quarter 2015 at the Kop-Flex Voluntary Cleanup Program (VCP) site in Hanover, Maryland. The report also describes the activities planned for the second quarter 2015. 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\mde reports\2015\3705_042415rejrep_kopflex_progress_rpt_5_dft.docx

cc: Mr. Stephen Clarke, Emerson Electric Co. (electronic copy)
Ms. Richelle Hanson, Maryland Department of the Environment

Enclosures

Progress Report No. 5

Kop-Flex VCP Site #31

January 2015 through March 2015

Site Name:	Kop-Flex Facility
Site Address:	7565 Harmans Road Hanover, Maryland 21076
Consultant:	WSP USA Corp.
Address:	11190 Sunrise Valley Dr., Suite 300 Reston, Virginia 20191
Phone No.:	(703) 709-6500
Site Coordinator:	Eric Johnson
Alternate:	Jim Bulman

1.0 Onsite Activities

The following activities were conducted during the First Quarter 2015.

- A public informational meeting involving representatives of the Maryland Department of the Environment (MDE) was convened on January 29, 2015, at the Brooklyn Park Community Library in Brooklyn, Maryland. The meeting was held to obtain public input concerning the application for renewal of State Discharge Permit 15-DP-3442 and National Pollutant Discharge Elimination System Permit MD0069094 for the site.

- In February 2015, EMERSUB 16 LLC received a letter from the MDE Water Supply Program requesting additional information in support of the previously submitted application for a Water Appropriation and Use Permit. The permit is for the planned extraction of groundwater from the affected portions of the aquifer system as part of the future remedial activities at the site.

- A meeting between Emerson, WSP, Trammell Crow (property developer) and their consultants, and MDE and U.S. Environmental Protection Agency (EPA), Region III was held at the MDE offices in Baltimore, Maryland on March 3, 2015, to review the status of site investigation and remedial planning activities. At the meeting MDE indicated a comprehensive Response Action Plan (RAP) addressing both soil and groundwater impacts was needed for the site and outlined key points to be included in the RAP. For the off-property area, results of recent groundwater sampling activities were reviewed, and MDE and EPA Region III discussed approaches to a revised groundwater monitoring program to assess the groundwater quality in the area hydraulically downgradient of the site.

- As part of the March 2015 quarterly sampling event for the offsite monitoring wells (see below), water level measurements were obtained from selected deep wells at the site. A contour map of the potentiometric surface for the Lower Patapsco Aquifer based on the contouring of water level data from both on and off-property deep monitoring wells is provided in Figure 1. Evaluation of the hydraulic head data indicates a generally south-southeast flow path for groundwater in this deeper semi-confined aquifer.

2.0 Off-Property Activities

2.1 Offsite Monitoring Wells

- Recently installed off-property monitoring wells were sampled the week of March 16, 2015, as requested by MDE. The analytical results are presented in Table 1. (A copy of the laboratory report for these samples is provided in Enclosure A.) Historical sampling data for the off-property wells are summarized in Table 2. No site-related VOCs were detected in the samples from the two Surficial Aquifer wells (MW-25-40 and MW-28-45) (Figure 2). For the wells completed in the Lower Patapsco Aquifer, high VOC concentrations were detected in the sample from well MW-25-130, which is located in the residential area south of the former Kop-Flex facility and Maryland Route 100. The lower concentrations of VOCs 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 on- and off-property deep monitoring well locations. The sampling data for the deep monitoring wells located further south of the MW-25 location contained trace to very low concentrations of the site-related VOCs (Figure 2). Additionally, 1,4-dioxane was not detected in the sample collected from the southeastern-most well (MW-35-298) in the investigation area (Table 1). Although this compound was detected at a concentration of 36.7 micrograms per liter in the September 2014 sample, the most recent data is consistent with the results from the December 2014 monitoring event.

2.2 Residential Well Sampling

- WSP continued with the sampling of the Phase 3 residential wells during the first quarter of 2015. These activities included sending, via Federal Express, a second access request letter to property owners on January 12, 2015, and conducting door-to-door visits to homeowners the week of February 9, 2015. As of the end of the reporting period, water samples have been collected from 28 residential wells and the non-potable well at the U.S. Post Office branch on Reece Road. The locations of the properties are shown in Figure 3. Fifteen of the properties either had no potable well on the property or declined access to collect a water sample. Six of the homeowners in the Phase 3 sampling area have not responded to repeated requests for access to conduct sampling, if a water-supply well is present on the property. It should also be noted that well sampling has not been conducted at one property (763 Donaldson Avenue) where access has been granted by the homeowner. WSP will remain in contact with the homeowner and anticipates sampling this well during the second quarter of 2015.

  Table 3 summarizes the historical analytical results for the potable wells sampled in the Phase 3 area. Copies of the certified laboratory reports for these well samples collected during the first quarter 2015 are included in Enclosure B. Site-related VOCs were not been detected in any of the private well samples in the Phase 3 area, except for a trace concentration (0.77 micrograms per liter) of 1,2-dichloroethane in the sample collected from the property at 854 Reece Road. Given this detection, MDE requested the collection of additional samples from this well to further characterize the levels of site-related VOCs at this location.

- A letter report describing the 2014 quarterly residential well sampling activities was submitted to MDE on March 4, 2015. This report presented the analytical results for the following properties in the Phase 1 and 2 areas:

- 7718 Twin Oaks Road
- 7740 Twin Oaks Road
- 7742 Twin Oaks Road
- 7932 Andorick Drive
- 1227 Old Camp Meade Road
- 1012 Minnetonka Road

The locations of the properties are shown in the enclosed Figure 4. No site-related VOCs were detected at concentrations above the applicable federal or state standards in any of the samples. Based on evaluation of the sampling data, WSP recommended the continued monitoring of the residential wells at 7740 Twin Oaks Road and 7932 Andorick Drive on a semi-annual sampling schedule.

- On March 19, 2015, water samples were collected from the potable wells at 7740 Twin Oaks Road and 7932 Andorick Drive, which were identified for continued monitoring in the sampling report submitted to MDE. The residential well located at 854 Reece Road was not sampled due to the inability to schedule the sampling event with the homeowner.

  The analytical results for these residential wells samples were received on April 14, 2015. Copies of the laboratory reporting sheets for these samples are included in the certified analytical reports provided in Enclosure B. No site-related VOCs were detected above the applicable groundwater comparative criteria in either of the well samples.

3.0 Planned Activities for Next Reporting Period (April 2015 – June 2015)

3.1 Onsite Activities

- Submittal of the site Response Action Plan (RAP) to MDE and completion of the public notification requirements (property sign and newspaper notice) pursuant to the MDE VCP guidance.
- Participation with MDE in a public informational meeting for the site RAP.
- Respond to information requests from MDE related to agency review of the Water Appropriation and Use Permit application.
- Conduct the first 2015 semi-annual sampling event for the existing onsite monitoring wells (including the deep well on the adjacent Williams-Scotsman property) in mid to late June.

3.2 Off-Property Activities

- Conduct the second quarter 2015 sampling of the off-property monitoring wells in conjunction with the semi-annual onsite groundwater sampling event.
- Submittal of a Groundwater Monitoring Plan for the off-property VOC plume to MDE and EPA Region III.

4.0 Key Personnel Changes

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

Figures

LEGEND
PROPERTY LINE
WATER MAIN
WATER MAIN EXTENSION
STREAM
WATER BODY
SHALLOW AND DEEP MONITORING WELLS
DEEP MONITORING WELL
PRIVATE WELL (APPROXIMATE LOCATION)
POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
INFERRED GROUNDWATER FLOW DIRECTION

MW-27D-113
MW-19-56
MW-23D-92
KOP–FLEX
MW-16D-101 86.27
MW-2D-139
MW-17D-97
MW-25D-105 85.37
85.24
MW-22D-114 84.59
MW-21D-102 85.13
MW-1D-112 83.98
WILLIAMS SCOTSMAN, INC.
MW-24D-128 78.20
ROUTE 100
STONY RUN
PENN CENTRAL RAILROAD TRACKS
MW-25 70.51
MW-28 57.44
MW-35 45.79
MW-33 46.78
MW-31 48.48
WATER LINE EXTENSION
MINNETONKA ROAD
MORGAN STANLEY DRIVE
SEVERN ELEMENTARY SCHOOL
SEVERN POST OFFICE
OLD CAMP MEADE ROAD
TELEGRAPH ROAD – ROUTE 174
DONALDSON AVENUE
OLD DONALDSON AVE.
TEAGUE WAY
BITTERSWEET ROAD
PINE TREE ROAD
SEVERN ROAD
SEVERN GRADE ROAD
RIVER ROAD
CARROLL CT.
ARUNDEL CT.
ROUTE 100
85
80
75
70
65
60
55
50

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

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POTENTIOMETRIC SURFACE CONTOURS FOR THE LOWER PATAPSCO AQUIFER (MARCH 2015)

KOP–FLEX VCP SITE
HANOVER, MARYLAND

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP
WSP USA Corp.
11190 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191
(703) 709-6500
www.wspgroup.com/usa

FIGURE 1

Drawing Number
00039196–025

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LEGEND
- PROPERTY LINE
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY
- SHALLOW AND DEEP MONITORING WELLS
- DEEP MONITORING WELL
- PRIVATE WELL (APPROXIMATE LOCATION)

MW-28	
	35'-45' / 200'-210'
1,1-DCA	ND / ND
1,2-DCA	ND / ND
1,1-DCE	ND / **10.8**
1,4-Dioxane	ND / 6.0
1,1,1-TCA	ND / ND

WELL ID
SCREEN INTERVAL (FEET BGS)
CONCENTRATION (ppb)
(BOLD INDICATES ABOVE MDE GENERIC STANDARDS)
CONSTITUENT

DCA DICHLOROETHANE
DCE DICHLOROETHENE
TCA TRICHLOROETHANE
ND NOT DETECTED

MW-27D-113
MW-19-56
MW-23D-92
KOP–FLEX
MW-16D-101
MW-2D-138
MW-17D-97
MW-26D-105
MW-22D-114
MW-21D-102
MW-1D-112
MW-24D-128
STONY RUN
PENN CENTRAL RAILROAD TRACKS
WILLIAMS SCOTSMAN, INC.
ROUTE 100

MW-25			
	30'-40'	120'-130'	182'-192'
1,1-DCA	ND	38.6	11.7
1,2-DCA	ND	**10.8**	ND
1,1-DCE	ND	**854**	**53**
1,4-Dioxane	ND	**446**	**49.4**
1,1,1-TCA	ND	43.5	13.7

MW-25

MW-28		
	35'-45'	200'-210'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	**10.8**
1,4-Dioxane	ND	6.0
1,1,1-TCA	ND	ND

MW-28

SIDEN DRIVE, WILLOW DRIVE, KIDWELL CT, FAIRBANKS DRIVE, ALPINE WAY, GAGNA DRIVE, CHAPEL, BOOTHE LANE, TUCKERMAN DRIVE, BOULDER CT, WISP COURT, FAIRBANKS CT, RICKER ROAD, 7769

WATER LINE EXTENSION
1066, 1063, 7708, 7710, 7718, 1059, 1054, 7709, 715, 1041, 1043, 7742, TWIN OAKS ROAD

TELEGRAPH ROAD – ROUTE 170
MINNETONKA ROAD
MORGAN STATION DRIVE
MONTGOMERY WARD
GABRIEL MARTIN

MW-33		
	226'-236'	285'-295'
1,1-DCA	ND	ND
1,2-DCA	ND	ND
1,1-DCE	ND	4.8
1,4-Dioxane	ND	**8**
1,1,1-TCA	ND	ND

MW-33

SEVERN ELEMENTARY SCHOOL
OLD CAMP MEADE ROAD
REECE ROAD – ROUTE 174
SEVERN STATION ROAD
SCATTERED PINES COURT
SEVERN ROAD
REECE ROAD
1245
BARNHILL CIRCLE
ANDORICK DRIVE
GREEN MOSS GLEN
1932
TEABERRY LANE
BITTERSWEET ROAD
1409
1397
1388
THY FRIEND PLACE
PRIDE TREE CIRCLE
SEVERN POST OFFICE
DONALDSON AVENUE
OLD DONALDSON AVE
CLARK STATION ROAD

MW-35	
	288'-298'
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-35

MW-31	
	270'-280'
1,1-DCA	ND
1,2-DCA	ND
1,1-DCE	ND
1,4-Dioxane	ND
1,1,1-TCA	ND

MW-31

MW-33

N

0 300 600 900
SCALE IN FEET

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FIGURE 2

WSP
WSP USA Corp.
11190 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191
(703) 709-6500
www.wspgroup.com/usa

OFFSITE MONITORING WELL VOC CONCENTRATIONS (MARCH 2015)

KOP–FLEX VCP SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

DRAWN BY	EGC
CHECKED	RJW 4/10/2015
APPROVED	

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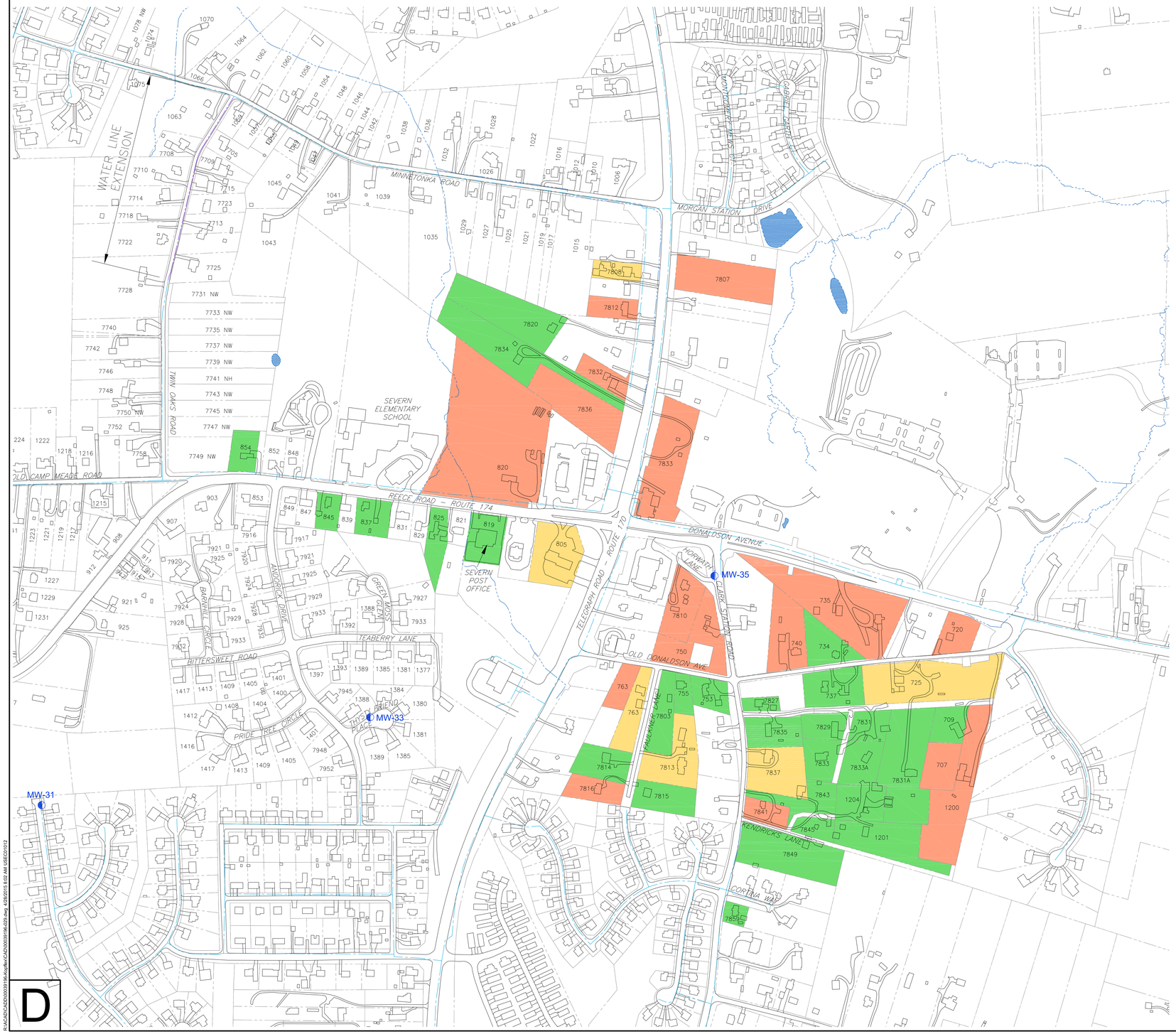
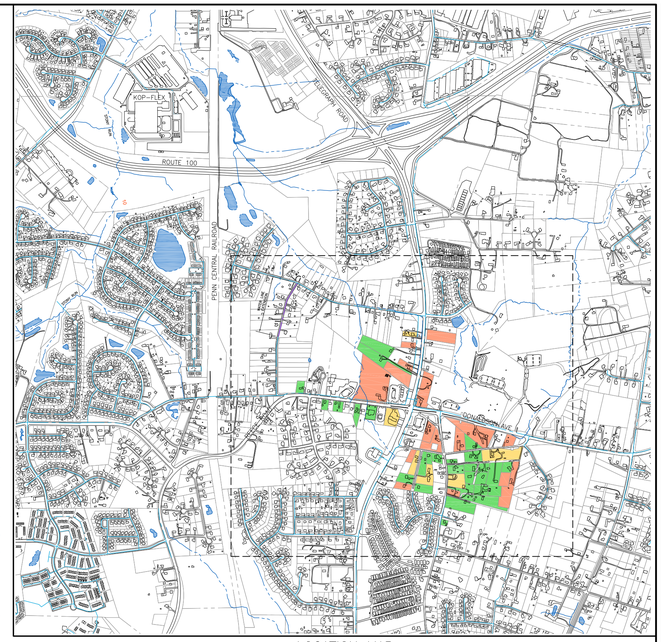
REVISIONS

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

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





LOCATION MAP
SCALE: 1"=1200'

LEGEND
- PROPERTY LINE
- WATER MAIN
- WATER MAIN EXTENSION
- STREAM
- WATER BODY
- DEEP MONITORING WELL
- 7836 STREET NUMBER (FROM PROPERTY ADDRESS)
- 7812 NO RESIDENCE OR WELL AT ADDRESS OR REFUSED SAMPLING
- 7834 SAMPLE COLLECTED
- 7832 NO REPLY/NOT SAMPLED

N

0 250 500 750
SCALE IN FEET

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REVISIONS

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

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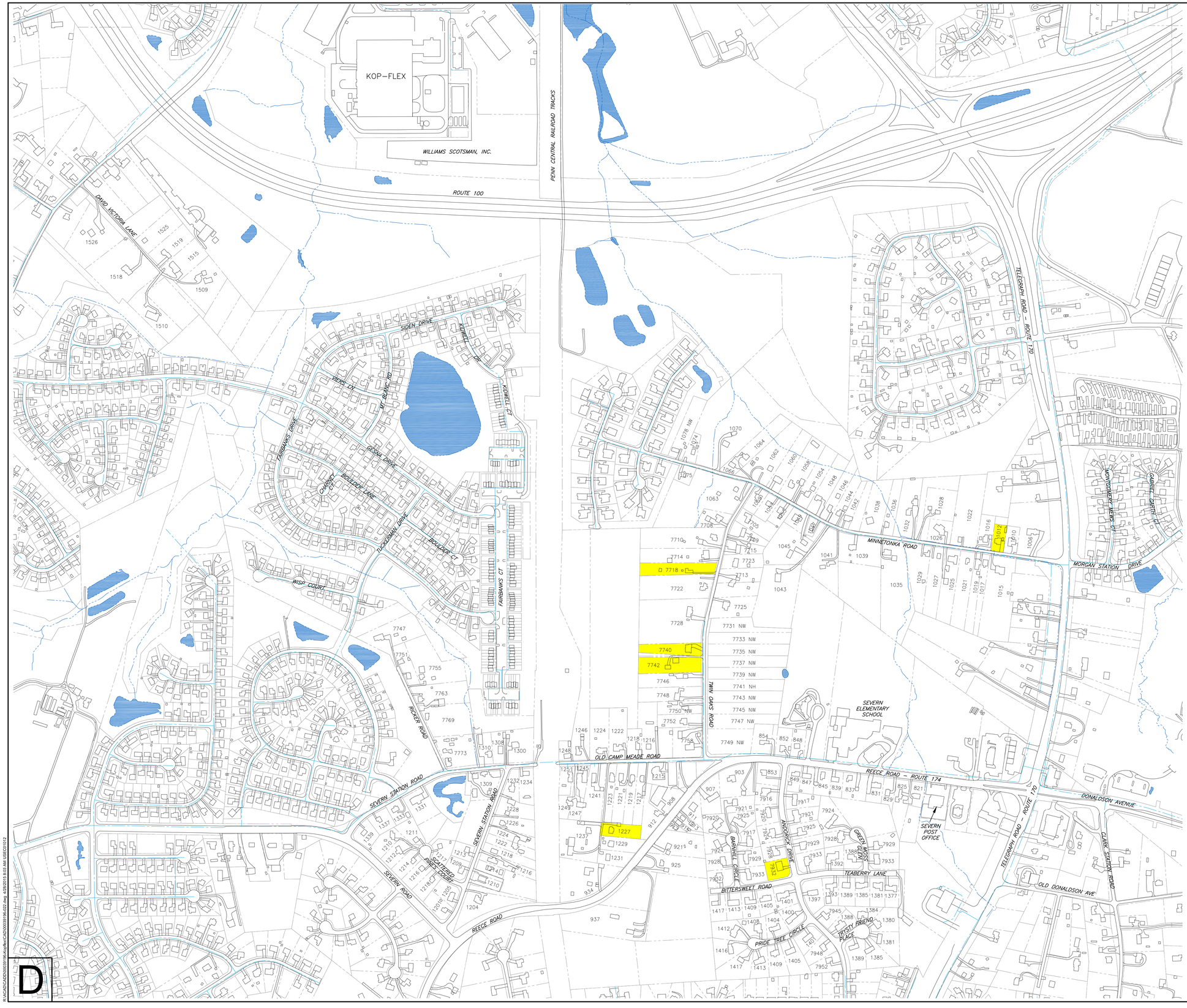
PHASE 3 RESIDENTIAL WELL SAMPLING LOCATIONS

KOP-FLEX VCP SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP
WSP USA Corp.
11190 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191
(703) 709-6500
www.wspgroup.com/usa

FIGURE 3

Drawing Number
00039196-029



LEGEND

- PROPERTY LINE
- WATER MAIN
- STREAM
- WATER BODY
- QUARTERLY RESIDENTIAL WELL PROPERTIES
- 7929 HOUSE ADDRESS

N

0 300 600 900

SCALE IN FEET

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1	Revised:	Drwn:	Appr.:	
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3	Revised:	Drwn:	Appr.:	

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DATE

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QUARTERLY SAMPLED RESIDENTIAL WELL LOCATIONS

KOP–FLEX VCP SITE
HANOVER, MARYLAND
PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP
WSP USA Corp.
11190 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191
(703) 709-6500
www.wspenvironmental.com/usa

FIGURE 4

Drawing Number
00039196–022

Tables

Table 1

Summary of Off-Property Monitoring Well Sample Results
March 2015 Sampling Event
Former Kop-Flex Facility
Hanover, Maryland

Analyte (b)	Groundwater Quality Criteria (ug/L)	MW-25-40 3/19/2015	MW-25-130 3/19/2015	MW-25-190 3/19/2015	MW-28-45 3/17/2015	MW-28-210 3/17/2015	MW-31-280 3/17/2015	MW-33-235 3/18/2015	MW-33-295 3/18/2015	MW-35-298 3/18/2015
1,1,1-Trichloroethane	200	1 U	43.5	13.7	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	90	1 U	38.6	11.7	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	7	1 U	**854**	**53**	1 U	**10.8**	1 U	1 U	4.8	1 U
1,2-Dichloroethane	5	1 U	**10.8**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	6.7	2 U	**446**	**49.4**	2 U	6	2 U	2 U	**8**	2 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

a/ U = not detected at a concentration above the method detection limit
Bolded number indicates concentration above the groundwater quality criteria
b/ All concentrations in micrograms per liter (µg/l)
c/ Groundwater Quality Criteria sources:
RSLs: http://www.mde.maryland.gov/assets/document/Final%20Update%20No%202.1%20dated%205-20-08(1).pdf

Table 2

Summary of COCs Detected in Off-Property Groundwater Samples
Former Kop-Flex Facility
Hanover, Maryland (a)

Monitoring Well	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,4- Dioxane	Methylene Chloride	Methyl-tert-butyl Ether	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Total VOCs
MW-25-40															
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	1
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	2
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
MW-25-130															
Sep-14	1.5	47.0	12.30	1,140.0	6.1	ND	492.0	ND	ND	1.1	ND	64.2	2.0	11.2	1,777
Dec-14 (c)	ND	31.4	ND	799.0	ND	ND	349.0	25.5	ND	ND	ND (d)	33.4	ND	ND	1,238
Mar-15 (c)	ND	38.6	10.8	854.0	ND	ND	446.0	66.8	ND	ND	ND	43.5	ND	ND	1,460
MW-25-190															
Sep-14	ND	10.8	ND	52.2	ND	ND	65.1	ND	ND	ND	ND	14.0	ND	ND	142
Dec-14	ND	13.3	ND	58.2	ND	ND	45.9	ND	ND	ND	ND	15.6	ND	ND	133
Mar-15	ND	11.7	ND	53.0	ND	ND	49.4	ND	ND	ND	ND	13.7	ND	ND	128
MW-28-45															
Sep-15	ND	ND	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	7
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
MW-28-210															
Sep-14	ND	ND	ND	6.8	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND	12
Dec-14	ND	ND	ND	9.4	ND	ND	4.1	ND	ND	ND	ND	ND	ND	ND	14
Mar-15	ND	ND	ND	10.8	ND	ND	6.0	ND	ND	ND	ND	ND	ND	ND	17
MW-31-280															
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Dec-14	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	2
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
MW-33-235															
Sep-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
MW-33-295															
Sep-14	ND	ND	ND	3.3	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	11
Dec-14	ND	ND	ND	3.5	ND	ND	7.1	ND	ND	ND	ND	ND	ND	ND	11
Mar-15	ND	ND	ND	4.8	ND	ND	8.0	ND	ND	ND	ND	ND	ND	ND	13
MW-35-298															
Sep-14	ND	ND	ND	ND	ND	ND	36.7	ND	ND	ND	ND	ND	ND	ND	37
Dec-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Mar-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0

a/ all samples measured in ppb (ug/L);
all samples collected using low-flow purging techniques
NA = not analyzed
ND = not detected
b/sample run at 20x dilution
c/ sample run at a 10x dilution
d/sample run at 2.5x dilution

Table 3

Phase 3 Residential Well Sampling
Analytical Results Summary Table, December 2014 - March 2015
Kop-Flex Inc.
Hanover, Maryland

Parameters (ug/L)	MCL	Sample ID: RW-7815-FN-121014 Sample Type: Pre-Treatment Sample Date: 12/10/2014	Sample ID: RW-7815-FN-121014F Sample Type: Post Treatment Sample Date: 12/10/2014	Sample ID: RW-7831A-CS-121014 Sample Type: Pre-Treatment Sample Date: 12/10/2014	Sample ID: RW-7833A-CS-121014 Sample Type: Pre-Treatment Sample Date: 12/10/2014	Sample ID: RW-753-DNS-121214 Sample Type: Pre-Treatment Sample Date: 12/12/2014	Sample ID: RW-819-REE-121214 Sample Type: Pre-Treatment Sample Date: 12/12/2014	Sample ID: RW-845-REE-121214 Sample Type: Pre-Treatment Sample Date: 12/12/2014	Sample ID: RW-7834TEL-121814 Sample Type: Pre-Treatment Sample Date: 12/18/2014	Sample ID: RW-7834TEL-121814F Sample Type: Post Treatment Sample Date: 12/18/2014
Benzene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	80 (a)	0.50 U	0.50 U	0.17 J	0.50 U	0.26 J	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	90 (a)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethylene	7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Tert Butyl Ether	20 (a)	0.50	0.46 J	1.2	0.50 U	1.1	0.50 U	1.7	0.50 U	0.50 U
Styrene	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.17 J
1,1,1-Trichloroethane	200	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane	6.7 (b)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

(a) Maryland Department of Environment Action Level
(b) Maryland Risk Based Level

Notes:
MCL - US Environmental Protection Agency (EPA)
Maximum Contaminant Level
U - Undetected, value reported is quantification limit

Table 3

Phase 3 Residential Well Sampling
Analytical Results Summary Table, December 2014 - March 2015
Kop-Flex Inc.
Hanover, Maryland

	Sample ID:	RW-7835CS-121814	RW-7849CS-121714	RW-837REE-121714	RW-837REE-121714F	RW-7090DA-122214	RW-7820TELE 123014	RW-7827CS 123014	RW-7833CS 11915	RW-100CS 11915
	Sample Type:	Pre-Treatment	Pre-Treatment	Pre-Treatment	Post Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment
	Sample Date:	12/18/2014	12/17/2014	12/17/2014	12/17/2014	12/22/2014	12/30/2014	12/30/2014	1/19/2015	1/19/2015
Parameters (ug/L)	**MCL**									
Benzene	5	0.18 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	80 (a)	0.11 J	0.19 J	0.50 U	0.50 U	0.19 J	0.14 J	0.50 U	0.11 J	0.12 J
1,1-Dichloroethane	90 (a)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethylene	7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Tert Butyl Ether	20 (a)	4.7	0.37 J	0.80	0.83	0.30 J	0.34 J	1.4	1.5	1.4
Styrene	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	200	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane	6.7 (b)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

(a) Maryland Department of Environment Action Level
(b) Maryland Risk Based Level

Notes:
MCL - US Environmental Protection Agency (EPA)
Maximum Contaminant Level
U - Undetected, value reported is quantification limit

Table 3

Phase 3 Residential Well Sampling
Analytical Results Summary Table, December 2014 - March 2015
Kop-Flex Inc.
Hanover, Maryland

	Sample ID:	RW-7814FN 11915	RW-737DNS 11915	RW-7803FN 12315	RW-7843CS 12315	RW-7831CS 12315	RW-7831CS 12315	RW-1201KL 012915F	RW-1201KL 12915	RW-1204KL 012915F
	Sample Type:	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Post-Treatment	Pre-Treatment	Post-Treatment
	Sample Date:	1/16/2015	1/19/2015	1/23/2015	1/23/2015	1/23/2015	1/23/2015	1/29/2015	1/29/2015	1/29/2015
Parameters (ug/L)	**MCL**									
Benzene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	80 (a)	0.13 J	0.18 J	0.50 U	0.50 U	0.39 J	0.42 J	0.15 J	0.15 J	0.31 J
1,1-Dichloroethane	90 (a)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethylene	7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Tert Butyl Ether	20 (a)	0.50 U	0.43 J	2.0	0.50 U	0.66	0.67	3.7	4.20	1.20
Styrene	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	200	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane	6.7 (b)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

(a) Maryland Department of Environment Action Level
(b) Maryland Risk Based Level

Notes:
MCL - US Environmental Protection Agency (EPA)
Maximum Contaminant Level
U - Undetected, value reported is quantification limit

Table 3

Phase 3 Residential Well Sampling
Analytical Results Summary Table, December 2014 - March 2015
Kop-Flex Inc.
Hanover, Maryland

	Sample ID:	RW-825REE 12915	RW-7859CS 20515	RW-7847CS 21015	RW-734DNS 021015F	RW-734DNS 21015	RW-824REE 21115	RW-7845CS 21115	RW-7550DA 31915
	Sample Type:	Pre-Treatment	Pre-Treatment	Pre-Treatment	Post-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment	Pre-Treatment
	Sample Date:	1/29/2015	2/5/2015	2/10/2015	2/10/2015	2/10/2015	2/11/2015	2/11/2015	3/19/2015
Parameters (ug/L)	**MCL**								
Benzene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	80 (a)	0.21 J	0.47 J	0.13 J	0.62	0.62	0.22 J	0.19 J	0.14 J
1,1-Dichloroethane	90 (a)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.77	0.50 U	0.50 U
1,1-Dichloroethylene	7	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Methyl Tert Butyl Ether	20 (a)	0.27 J	1.1	1.7	0.84	0.84	1.7	1	0.96
Styrene	100	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1,1-Trichloroethane	200	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Tetrachloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethylene	5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,4-Dioxane	6.7 (b)	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

(a) Maryland Department of Environment Action Level
(b) Maryland Risk Based Level

Notes:
MCL - US Environmental Protection Agency (EPA)
Maximum Contaminant Level
U - Undetected, value reported is quantification limit

Enclosure A – Laboratory Report for March 2015 Offsite Monitoring Well Samples

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

April 21, 2015

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

RE: Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Dear Eric Johnson:
Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

Report revised 4/21/15 to include re-run results for MW-33-235.

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

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Keith Green, WSP Environmental Strategies

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

CERTIFICATIONS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

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
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92242145001	**MW-28-45**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145002	**MW-28-210**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145003	**MW-100**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145004	**MW-31-280**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145005	**MW-33-235**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145006	**MW-33-295**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145007	**MW-35-298**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145008	**MW-25-40**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145009	**MW-25-130**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145010	**MW-25-190**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145011	**EB-031915**	EPA 8260	CAH	64	PASI-C
		EPA 8260B Mod.	DLK	3	PASI-C
92242145012	**TRIP BLANK 1**	EPA 8260	CAH	64	PASI-C
92242145013	**TRIP BLANK 2**	EPA 8260	CAH	64	PASI-C
92242145014	**MW-33-235 Re-run #1**	EPA 8260	GAW	64	PASI-C
92242145015	**MW-33-235 Re-run #2**	EPA 8260	GAW	64	PASI-C

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-28-45 **Lab ID: 92242145001** Collected: 03/17/15 11:40 Received: 03/20/15 09:45 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		03/28/15 03:37	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 03:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 03:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 03:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 03:37	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 03:37	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 03:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 03:37	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 03:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 03:37	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 03:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 03:37	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 03:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 03:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 03:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 03:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 03:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 03:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 03:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 03:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 03:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 03:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 03:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 03:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:37	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 03:37	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 03:37	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 03:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 03:37	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 03:37	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 03:37	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 03:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 03:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 03:37	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 03:37	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 03:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 03:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 03:37	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-28-45 **Lab ID: 92242145001** Collected: 03/17/15 11:40 Received: 03/20/15 09:45 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		03/28/15 03:37	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 03:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 03:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 03:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 03:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 03:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 03:37	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 03:37	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 03:37	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 03:37	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 03:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 03:37	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		03/28/15 03:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		03/28/15 03:37	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		03/28/15 03:37	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		03/25/15 15:04	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	112	%	50-150	1		03/25/15 15:04	17060-07-0	
Toluene-d8 (S)	102	%	50-150	1		03/25/15 15:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-28-210 **Lab ID: 92242145002** Collected: 03/17/15 13:20 Received: 03/20/15 09:45 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		03/28/15 03:53	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 03:53	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 03:53	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 03:53	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 03:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 03:53	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 03:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 03:53	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 03:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 03:53	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 03:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 03:53	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 03:53	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 03:53	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 03:53	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 03:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 03:53	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 03:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 03:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 03:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 03:53	107-06-2	
1,1-Dichloroethene	**10.6**	ug/L	1.0	1		03/28/15 03:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 03:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 03:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:53	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:53	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 03:53	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:53	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 03:53	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 03:53	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 03:53	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 03:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 03:53	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 03:53	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 03:53	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 03:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 03:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 03:53	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 03:53	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 03:53	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 03:53	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 03:53	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-28-210 **Lab ID: 92242145002** Collected: 03/17/15 13:20 Received: 03/20/15 09:45 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		03/28/15 03:53	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 03:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 03:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 03:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 03:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 03:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 03:53	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 03:53	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 03:53	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 03:53	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 03:53	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 03:53	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 03:53	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		03/28/15 03:53	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		03/28/15 03:53	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		03/28/15 03:53	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**5.0**	ug/L	2.0	1		03/25/15 15:24	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	50-150	1		03/25/15 15:24	17060-07-0	
Toluene-d8 (S)	102	%	50-150	1		03/25/15 15:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-100 **Lab ID: 92242145003** Collected: 03/17/15 12:00 Received: 03/20/15 09:45 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		03/28/15 04:10	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 04:10	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 04:10	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 04:10	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 04:10	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 04:10	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 04:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 04:10	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 04:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 04:10	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 04:10	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 04:10	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:10	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 04:10	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 04:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 04:10	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 04:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 04:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:10	107-06-2	
1,1-Dichloroethene	**10.5**	ug/L	1.0	1		03/28/15 04:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:10	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 04:10	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 04:10	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 04:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 04:10	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 04:10	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 04:10	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 04:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 04:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 04:10	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 04:10	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 04:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:10	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-100 **Lab ID: 92242145003** Collected: 03/17/15 12:00 Received: 03/20/15 09:45 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		03/28/15 04:10	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 04:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 04:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 04:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 04:10	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 04:10	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 04:10	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 04:10	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 04:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 04:10	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		03/28/15 04:10	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		03/28/15 04:10	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/28/15 04:10	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**5.8**	ug/L	2.0	1		03/25/15 16:25	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	115	%	50-150	1		03/25/15 16:25	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		03/25/15 16:25	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-31-280 **Lab ID: 92242145004** Collected: 03/17/15 15:54 Received: 03/20/15 09:45 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		03/28/15 04:26	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 04:26	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 04:26	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 04:26	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 04:26	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 04:26	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 04:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 04:26	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 04:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 04:26	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 04:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 04:26	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:26	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 04:26	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 04:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 04:26	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 04:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 04:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:26	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 04:26	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 04:26	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 04:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 04:26	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 04:26	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 04:26	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 04:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 04:26	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 04:26	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 04:26	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 04:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:26	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-31-280 **Lab ID: 92242145004** Collected: 03/17/15 15:54 Received: 03/20/15 09:45 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		03/28/15 04:26	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 04:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 04:26	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 04:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 04:26	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 04:26	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 04:26	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 04:26	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 04:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 04:26	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		03/28/15 04:26	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		03/28/15 04:26	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/28/15 04:26	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		03/25/15 16:46	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	114	%	50-150	1		03/25/15 16:46	17060-07-0	
Toluene-d8 (S)	100	%	50-150	1		03/25/15 16:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 **Lab ID: 92242145005** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		03/28/15 04:43	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 04:43	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 04:43	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 04:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 04:43	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 04:43	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 04:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 04:43	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 04:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 04:43	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 04:43	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 04:43	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:43	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 04:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 04:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 04:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 04:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 04:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:43	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 04:43	108-20-3	
1,4-Dioxane (p-Dioxane)	**347**	ug/L	150	1		03/28/15 04:43	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 04:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 04:43	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 04:43	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 04:43	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 04:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 04:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 04:43	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 04:43	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 04:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:43	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 **Lab ID: 92242145005** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		03/28/15 04:43	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 04:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 04:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 04:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 04:43	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 04:43	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 04:43	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 04:43	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 04:43	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 04:43	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		03/28/15 04:43	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		03/28/15 04:43	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		03/28/15 04:43	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		03/25/15 17:06	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	115	%	50-150	1		03/25/15 17:06	17060-07-0	
Toluene-d8 (S)	100	%	50-150	1		03/25/15 17:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-295 **Lab ID: 92242145006** Collected: 03/18/15 13:25 Received: 03/20/15 09:45 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		03/28/15 04:59	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 04:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 04:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 04:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 04:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 04:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 04:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 04:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 04:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 04:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 04:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 04:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 04:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 04:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 04:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 04:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 04:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 04:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 04:59	107-06-2	
1,1-Dichloroethene	**4.6**	ug/L	1.0	1		03/28/15 04:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 04:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 04:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 04:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 04:59	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 04:59	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 04:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 04:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 04:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 04:59	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 04:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 04:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 04:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 04:59	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 04:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 04:59	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-295 **Lab ID: 92242145006** Collected: 03/18/15 13:25 Received: 03/20/15 09:45 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		03/28/15 04:59	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 04:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 04:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 04:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 04:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 04:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 04:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 04:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 04:59	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 04:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 04:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 04:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		03/28/15 04:59	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		03/28/15 04:59	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/28/15 04:59	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**8.0**	ug/L	2.0	1		03/25/15 17:26	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	116	%	50-150	1		03/25/15 17:26	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		03/25/15 17:26	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-35-298 **Lab ID: 92242145007** Collected: 03/18/15 17:00 Received: 03/20/15 09:45 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		03/28/15 05:16	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 05:16	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 05:16	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 05:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 05:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 05:16	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 05:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 05:16	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 05:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 05:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 05:16	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 05:16	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:16	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 05:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 05:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 05:16	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 05:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 05:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:16	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 05:16	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 05:16	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 05:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 05:16	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 05:16	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 05:16	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 05:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 05:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 05:16	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 05:16	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 05:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:16	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-35-298 **Lab ID: 92242145007** Collected: 03/18/15 17:00 Received: 03/20/15 09:45 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		03/28/15 05:16	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 05:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 05:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 05:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 05:16	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 05:16	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 05:16	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 05:16	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 05:16	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 05:16	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		03/28/15 05:16	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		03/28/15 05:16	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		03/28/15 05:16	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		03/25/15 17:47	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%	50-150	1		03/25/15 17:47	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		03/25/15 17:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-40 **Lab ID: 92242145008** Collected: 03/19/15 09:00 Received: 03/20/15 09:45 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		03/28/15 05:33	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 05:33	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 05:33	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 05:33	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 05:33	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 05:33	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 05:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 05:33	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 05:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 05:33	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 05:33	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 05:33	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:33	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 05:33	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 05:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 05:33	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 05:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 05:33	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:33	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:33	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:33	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:33	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 05:33	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 05:33	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 05:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 05:33	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 05:33	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 05:33	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 05:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 05:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 05:33	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 05:33	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 05:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:33	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-40 **Lab ID: 92242145008** Collected: 03/19/15 09:00 Received: 03/20/15 09:45 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		03/28/15 05:33	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 05:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 05:33	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 05:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 05:33	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 05:33	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 05:33	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 05:33	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 05:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 05:33	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		03/28/15 05:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		03/28/15 05:33	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/28/15 05:33	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	ND	ug/L	2.0	1		03/25/15 18:07	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	50-150	1		03/25/15 18:07	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		03/25/15 18:07	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-130 **Lab ID: 92242145009** Collected: 03/19/15 17:15 Received: 03/20/15 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/L	250	10		03/28/15 09:41	67-64-1	
Benzene	ND	ug/L	10.0	10		03/28/15 09:41	71-43-2	
Bromobenzene	ND	ug/L	10.0	10		03/28/15 09:41	108-86-1	
Bromochloromethane	ND	ug/L	10.0	10		03/28/15 09:41	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	10		03/28/15 09:41	75-27-4	
Bromoform	ND	ug/L	10.0	10		03/28/15 09:41	75-25-2	
Bromomethane	ND	ug/L	20.0	10		03/28/15 09:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	10		03/28/15 09:41	78-93-3	
Carbon tetrachloride	ND	ug/L	10.0	10		03/28/15 09:41	56-23-5	
Chlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	108-90-7	
Chloroethane	ND	ug/L	10.0	10		03/28/15 09:41	75-00-3	
Chloroform	ND	ug/L	10.0	10		03/28/15 09:41	67-66-3	
Chloromethane	ND	ug/L	10.0	10		03/28/15 09:41	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	10		03/28/15 09:41	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	10		03/28/15 09:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	20.0	10		03/28/15 09:41	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	10		03/28/15 09:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	10		03/28/15 09:41	106-93-4	
Dibromomethane	ND	ug/L	10.0	10		03/28/15 09:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	10		03/28/15 09:41	75-71-8	
1,1-Dichloroethane	**38.6**	ug/L	10.0	10		03/28/15 09:41	75-34-3	
1,2-Dichloroethane	**10.8**	ug/L	10.0	10		03/28/15 09:41	107-06-2	
1,1-Dichloroethene	**854**	ug/L	10.0	10		03/28/15 09:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	10.0	10		03/28/15 09:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	10.0	10		03/28/15 09:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	10		03/28/15 09:41	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	10		03/28/15 09:41	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	10		03/28/15 09:41	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	10		03/28/15 09:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	10.0	10		03/28/15 09:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	10		03/28/15 09:41	10061-02-6	
Diisopropyl ether	ND	ug/L	10.0	10		03/28/15 09:41	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	1500	10		03/28/15 09:41	123-91-1	
Ethylbenzene	ND	ug/L	10.0	10		03/28/15 09:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	10		03/28/15 09:41	87-68-3	
2-Hexanone	ND	ug/L	50.0	10		03/28/15 09:41	591-78-6	
p-Isopropyltoluene	ND	ug/L	10.0	10		03/28/15 09:41	99-87-6	
Methylene Chloride	**66.8**	ug/L	20.0	10		03/28/15 09:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0	10		03/28/15 09:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	10.0	10		03/28/15 09:41	1634-04-4	
Naphthalene	ND	ug/L	10.0	10		03/28/15 09:41	91-20-3	
Styrene	ND	ug/L	10.0	10		03/28/15 09:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	10		03/28/15 09:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	10		03/28/15 09:41	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-130 **Lab ID: 92242145009** Collected: 03/19/15 17:15 Received: 03/20/15 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Tetrachloroethene	ND	ug/L	10.0	10		03/28/15 09:41	127-18-4	
Toluene	ND	ug/L	10.0	10		03/28/15 09:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	10		03/28/15 09:41	120-82-1	
1,1,1-Trichloroethane	**43.5**	ug/L	10.0	10		03/28/15 09:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	10		03/28/15 09:41	79-00-5	
Trichloroethene	ND	ug/L	10.0	10		03/28/15 09:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	10		03/28/15 09:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	10.0	10		03/28/15 09:41	96-18-4	
Vinyl acetate	ND	ug/L	20.0	10		03/28/15 09:41	108-05-4	
Vinyl chloride	ND	ug/L	10.0	10		03/28/15 09:41	75-01-4	
Xylene (Total)	ND	ug/L	20.0	10		03/28/15 09:41	1330-20-7	
m&p-Xylene	ND	ug/L	20.0	10		03/28/15 09:41	179601-23-1	
o-Xylene	ND	ug/L	10.0	10		03/28/15 09:41	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	10		03/28/15 09:41	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	10		03/28/15 09:41	17060-07-0	
Toluene-d8 (S)	100	%	70-130	10		03/28/15 09:41	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**446**	ug/L	20.0	10		03/25/15 18:27	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	115	%	50-150	10		03/25/15 18:27	17060-07-0	
Toluene-d8 (S)	102	%	50-150	10		03/25/15 18:27	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-190 **Lab ID: 92242145010** Collected: 03/19/15 15:15 Received: 03/20/15 09:45 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		03/28/15 07:12	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 07:12	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 07:12	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 07:12	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 07:12	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 07:12	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 07:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 07:12	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 07:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 07:12	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 07:12	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 07:12	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 07:12	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 07:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 07:12	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 07:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 07:12	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 07:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 07:12	75-71-8	
1,1-Dichloroethane	**11.7**	ug/L	1.0	1		03/28/15 07:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 07:12	107-06-2	
1,1-Dichloroethene	**53.0**	ug/L	1.0	1		03/28/15 07:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 07:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 07:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 07:12	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 07:12	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 07:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 07:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 07:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 07:12	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 07:12	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 07:12	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 07:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 07:12	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 07:12	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 07:12	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 07:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 07:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 07:12	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 07:12	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 07:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 07:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 07:12	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-25-190 **Lab ID: 92242145010** Collected: 03/19/15 15:15 Received: 03/20/15 09:45 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		03/28/15 07:12	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 07:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 07:12	120-82-1	
1,1,1-Trichloroethane	**13.7**	ug/L	1.0	1		03/28/15 07:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 07:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 07:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 07:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 07:12	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 07:12	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 07:12	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 07:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 07:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 07:12	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	100	%	70-130	1		03/28/15 07:12	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		03/28/15 07:12	17060-07-0	
Toluene-d8 (S)	102	%	70-130	1		03/28/15 07:12	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**49.4**	ug/L	2.0	1		03/25/15 18:48	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	116	%	50-150	1		03/25/15 18:48	17060-07-0	
Toluene-d8 (S)	100	%	50-150	1		03/25/15 18:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: EB-031915 **Lab ID: 92242145011** Collected: 03/19/15 14:30 Received: 03/20/15 09:45 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		03/27/15 17:59	67-64-1	
Benzene	ND	ug/L	1.0	1		03/27/15 17:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/27/15 17:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/27/15 17:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/27/15 17:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/27/15 17:59	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/27/15 17:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/27/15 17:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/27/15 17:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/27/15 17:59	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/27/15 17:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/27/15 17:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/27/15 17:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/27/15 17:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/27/15 17:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/27/15 17:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/27/15 17:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/27/15 17:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/27/15 17:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/27/15 17:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/27/15 17:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/27/15 17:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/27/15 17:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/27/15 17:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/27/15 17:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/27/15 17:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/27/15 17:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/27/15 17:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/27/15 17:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/27/15 17:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/27/15 17:59	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/27/15 17:59	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/27/15 17:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/27/15 17:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/27/15 17:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/27/15 17:59	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/27/15 17:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/27/15 17:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/27/15 17:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/27/15 17:59	91-20-3	
Styrene	ND	ug/L	1.0	1		03/27/15 17:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/27/15 17:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/27/15 17:59	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: EB-031915 **Lab ID: 92242145011** Collected: 03/19/15 14:30 Received: 03/20/15 09:45 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		03/27/15 17:59	127-18-4	
Toluene	ND	ug/L	1.0	1		03/27/15 17:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/27/15 17:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/27/15 17:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/27/15 17:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/27/15 17:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/27/15 17:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/27/15 17:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/27/15 17:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/27/15 17:59	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/27/15 17:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/27/15 17:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/27/15 17:59	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		03/27/15 17:59	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		03/27/15 17:59	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		03/27/15 17:59	2037-26-5	
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (p-Dioxane)	**3.2**	ug/L	2.0	1		03/25/15 19:08	123-91-1	
Surrogates								
1,2-Dichloroethane-d4 (S)	116	%	50-150	1		03/25/15 19:08	17060-07-0	
Toluene-d8 (S)	101	%	50-150	1		03/25/15 19:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: TRIP BLANK 1 **Lab ID: 92242145012** Collected: 03/17/15 00:00 Received: 03/20/15 09:45 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		03/27/15 18:15	67-64-1	
Benzene	ND	ug/L	1.0	1		03/27/15 18:15	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/27/15 18:15	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/27/15 18:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/27/15 18:15	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/27/15 18:15	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/27/15 18:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/27/15 18:15	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/27/15 18:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/27/15 18:15	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/27/15 18:15	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/27/15 18:15	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/27/15 18:15	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/27/15 18:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/27/15 18:15	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/27/15 18:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/27/15 18:15	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/27/15 18:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/27/15 18:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/27/15 18:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/27/15 18:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/27/15 18:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/27/15 18:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/27/15 18:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/27/15 18:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/27/15 18:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/27/15 18:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/27/15 18:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/27/15 18:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/27/15 18:15	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/27/15 18:15	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/27/15 18:15	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/27/15 18:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/27/15 18:15	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/27/15 18:15	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/27/15 18:15	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/27/15 18:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/27/15 18:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/27/15 18:15	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/27/15 18:15	91-20-3	
Styrene	ND	ug/L	1.0	1		03/27/15 18:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/27/15 18:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/27/15 18:15	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: TRIP BLANK 1 **Lab ID: 92242145012** Collected: 03/17/15 00:00 Received: 03/20/15 09:45 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		03/27/15 18:15	127-18-4	
Toluene	ND	ug/L	1.0	1		03/27/15 18:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/27/15 18:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/27/15 18:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/27/15 18:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/27/15 18:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/27/15 18:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/27/15 18:15	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/27/15 18:15	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/27/15 18:15	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/27/15 18:15	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/27/15 18:15	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/27/15 18:15	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		03/27/15 18:15	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		03/27/15 18:15	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		03/27/15 18:15	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: TRIP BLANK 2 **Lab ID: 92242145013** Collected: 03/19/15 00:00 Received: 03/20/15 09:45 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		03/28/15 05:49	67-64-1	
Benzene	ND	ug/L	1.0	1		03/28/15 05:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		03/28/15 05:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		03/28/15 05:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		03/28/15 05:49	75-27-4	
Bromoform	ND	ug/L	1.0	1		03/28/15 05:49	75-25-2	
Bromomethane	ND	ug/L	2.0	1		03/28/15 05:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	1		03/28/15 05:49	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	1		03/28/15 05:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	108-90-7	
Chloroethane	ND	ug/L	1.0	1		03/28/15 05:49	75-00-3	
Chloroform	ND	ug/L	1.0	1		03/28/15 05:49	67-66-3	
Chloromethane	ND	ug/L	1.0	1		03/28/15 05:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		03/28/15 05:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		03/28/15 05:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		03/28/15 05:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/28/15 05:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		03/28/15 05:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		03/28/15 05:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/28/15 05:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		03/28/15 05:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		03/28/15 05:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		03/28/15 05:49	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	1		03/28/15 05:49	108-20-3	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		03/28/15 05:49	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		03/28/15 05:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		03/28/15 05:49	87-68-3	
2-Hexanone	ND	ug/L	5.0	1		03/28/15 05:49	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	1		03/28/15 05:49	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		03/28/15 05:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		03/28/15 05:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		03/28/15 05:49	1634-04-4	
Naphthalene	ND	ug/L	1.0	1		03/28/15 05:49	91-20-3	
Styrene	ND	ug/L	1.0	1		03/28/15 05:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		03/28/15 05:49	79-34-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: TRIP BLANK 2 **Lab ID: 92242145013** Collected: 03/19/15 00:00 Received: 03/20/15 09:45 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		03/28/15 05:49	127-18-4	
Toluene	ND	ug/L	1.0	1		03/28/15 05:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		03/28/15 05:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		03/28/15 05:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		03/28/15 05:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		03/28/15 05:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		03/28/15 05:49	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1		03/28/15 05:49	108-05-4	
Vinyl chloride	ND	ug/L	1.0	1		03/28/15 05:49	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		03/28/15 05:49	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		03/28/15 05:49	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		03/28/15 05:49	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	98	%	70-130	1		03/28/15 05:49	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		03/28/15 05:49	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		03/28/15 05:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 Re-run #1 **Lab ID: 92242145014** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		04/14/15 11:19	67-64-1	H1
Benzene	ND	ug/L	1.0	1		04/14/15 11:19	71-43-2	H1
Bromobenzene	ND	ug/L	1.0	1		04/14/15 11:19	108-86-1	H1
Bromochloromethane	ND	ug/L	1.0	1		04/14/15 11:19	74-97-5	H1
Bromodichloromethane	ND	ug/L	1.0	1		04/14/15 11:19	75-27-4	H1
Bromoform	ND	ug/L	1.0	1		04/14/15 11:19	75-25-2	H1
Bromomethane	ND	ug/L	2.0	1		04/14/15 11:19	74-83-9	H1,L2
2-Butanone (MEK)	ND	ug/L	5.0	1		04/14/15 11:19	78-93-3	H1
Carbon tetrachloride	ND	ug/L	1.0	1		04/14/15 11:19	56-23-5	H1
Chlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	108-90-7	H1
Chloroethane	ND	ug/L	1.0	1		04/14/15 11:19	75-00-3	H1
Chloroform	ND	ug/L	1.0	1		04/14/15 11:19	67-66-3	H1
Chloromethane	ND	ug/L	1.0	1		04/14/15 11:19	74-87-3	H1,L2
2-Chlorotoluene	ND	ug/L	1.0	1		04/14/15 11:19	95-49-8	H1
4-Chlorotoluene	ND	ug/L	1.0	1		04/14/15 11:19	106-43-4	H1
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		04/14/15 11:19	96-12-8	H1
Dibromochloromethane	ND	ug/L	1.0	1		04/14/15 11:19	124-48-1	H1
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/14/15 11:19	106-93-4	H1
Dibromomethane	ND	ug/L	1.0	1		04/14/15 11:19	74-95-3	H1
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	95-50-1	H1
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	541-73-1	H1
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	106-46-7	H1
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/14/15 11:19	75-71-8	H1
1,1-Dichloroethane	ND	ug/L	1.0	1		04/14/15 11:19	75-34-3	H1
1,2-Dichloroethane	ND	ug/L	1.0	1		04/14/15 11:19	107-06-2	H1
1,1-Dichloroethene	ND	ug/L	1.0	1		04/14/15 11:19	75-35-4	H1
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/14/15 11:19	156-59-2	H1
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/14/15 11:19	156-60-5	H1
1,2-Dichloropropane	ND	ug/L	1.0	1		04/14/15 11:19	78-87-5	H1
1,3-Dichloropropane	ND	ug/L	1.0	1		04/14/15 11:19	142-28-9	H1
2,2-Dichloropropane	ND	ug/L	1.0	1		04/14/15 11:19	594-20-7	H1
1,1-Dichloropropene	ND	ug/L	1.0	1		04/14/15 11:19	563-58-6	H1
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/14/15 11:19	10061-01-5	H1
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/14/15 11:19	10061-02-6	H1
Diisopropyl ether	ND	ug/L	1.0	1		04/14/15 11:19	108-20-3	H1
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		04/14/15 11:19	123-91-1	H1
Ethylbenzene	ND	ug/L	1.0	1		04/14/15 11:19	100-41-4	H1
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/14/15 11:19	87-68-3	H1
2-Hexanone	ND	ug/L	5.0	1		04/14/15 11:19	591-78-6	H1
p-Isopropyltoluene	ND	ug/L	1.0	1		04/14/15 11:19	99-87-6	H1
Methylene Chloride	ND	ug/L	2.0	1		04/14/15 11:19	75-09-2	H1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/14/15 11:19	108-10-1	H1
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/14/15 11:19	1634-04-4	H1
Naphthalene	ND	ug/L	1.0	1		04/14/15 11:19	91-20-3	H1
Styrene	ND	ug/L	1.0	1		04/14/15 11:19	100-42-5	H1
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/14/15 11:19	630-20-6	H1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/14/15 11:19	79-34-5	H1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 Re-run #1 **Lab ID: 92242145014** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		04/14/15 11:19	127-18-4	H1
Toluene	ND	ug/L	1.0	1		04/14/15 11:19	108-88-3	H1
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	87-61-6	H1
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/14/15 11:19	120-82-1	H1
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/14/15 11:19	71-55-6	H1
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/14/15 11:19	79-00-5	H1
Trichloroethene	ND	ug/L	1.0	1		04/14/15 11:19	79-01-6	H1
Trichlorofluoromethane	ND	ug/L	1.0	1		04/14/15 11:19	75-69-4	H1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/14/15 11:19	96-18-4	H1
Vinyl acetate	ND	ug/L	2.0	1		04/14/15 11:19	108-05-4	H1
Vinyl chloride	ND	ug/L	1.0	1		04/14/15 11:19	75-01-4	H1
Xylene (Total)	ND	ug/L	2.0	1		04/14/15 11:19	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		04/14/15 11:19	179601-23-1	H1
o-Xylene	ND	ug/L	1.0	1		04/14/15 11:19	95-47-6	H1
Surrogates								
4-Bromofluorobenzene (S)	99	%	70-130	1		04/14/15 11:19	460-00-4	H5
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		04/14/15 11:19	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		04/14/15 11:19	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 Re-run #2 **Lab ID: 92242145015** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		04/15/15 05:47	67-64-1	H1
Benzene	ND	ug/L	1.0	1		04/15/15 05:47	71-43-2	H1
Bromobenzene	ND	ug/L	1.0	1		04/15/15 05:47	108-86-1	H1
Bromochloromethane	ND	ug/L	1.0	1		04/15/15 05:47	74-97-5	H1
Bromodichloromethane	ND	ug/L	1.0	1		04/15/15 05:47	75-27-4	H1
Bromoform	ND	ug/L	1.0	1		04/15/15 05:47	75-25-2	H1
Bromomethane	ND	ug/L	2.0	1		04/15/15 05:47	74-83-9	H1,L2
2-Butanone (MEK)	ND	ug/L	5.0	1		04/15/15 05:47	78-93-3	H1
Carbon tetrachloride	ND	ug/L	1.0	1		04/15/15 05:47	56-23-5	H1
Chlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	108-90-7	H1
Chloroethane	ND	ug/L	1.0	1		04/15/15 05:47	75-00-3	H1
Chloroform	ND	ug/L	1.0	1		04/15/15 05:47	67-66-3	H1
Chloromethane	ND	ug/L	1.0	1		04/15/15 05:47	74-87-3	H1,L2
2-Chlorotoluene	ND	ug/L	1.0	1		04/15/15 05:47	95-49-8	H1
4-Chlorotoluene	ND	ug/L	1.0	1		04/15/15 05:47	106-43-4	H1
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		04/15/15 05:47	96-12-8	H1
Dibromochloromethane	ND	ug/L	1.0	1		04/15/15 05:47	124-48-1	H1
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		04/15/15 05:47	106-93-4	H1
Dibromomethane	ND	ug/L	1.0	1		04/15/15 05:47	74-95-3	H1
1,2-Dichlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	95-50-1	H1
1,3-Dichlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	541-73-1	H1
1,4-Dichlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	106-46-7	H1
Dichlorodifluoromethane	ND	ug/L	1.0	1		04/15/15 05:47	75-71-8	H1
1,1-Dichloroethane	ND	ug/L	1.0	1		04/15/15 05:47	75-34-3	H1
1,2-Dichloroethane	ND	ug/L	1.0	1		04/15/15 05:47	107-06-2	H1
1,1-Dichloroethene	ND	ug/L	1.0	1		04/15/15 05:47	75-35-4	H1
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		04/15/15 05:47	156-59-2	H1
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		04/15/15 05:47	156-60-5	H1
1,2-Dichloropropane	ND	ug/L	1.0	1		04/15/15 05:47	78-87-5	H1
1,3-Dichloropropane	ND	ug/L	1.0	1		04/15/15 05:47	142-28-9	H1
2,2-Dichloropropane	ND	ug/L	1.0	1		04/15/15 05:47	594-20-7	H1
1,1-Dichloropropene	ND	ug/L	1.0	1		04/15/15 05:47	563-58-6	H1
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/15 05:47	10061-01-5	H1
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		04/15/15 05:47	10061-02-6	H1
Diisopropyl ether	ND	ug/L	1.0	1		04/15/15 05:47	108-20-3	H1
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		04/15/15 05:47	123-91-1	H1
Ethylbenzene	ND	ug/L	1.0	1		04/15/15 05:47	100-41-4	H1
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		04/15/15 05:47	87-68-3	H1
2-Hexanone	ND	ug/L	5.0	1		04/15/15 05:47	591-78-6	H1
p-Isopropyltoluene	ND	ug/L	1.0	1		04/15/15 05:47	99-87-6	H1
Methylene Chloride	ND	ug/L	2.0	1		04/15/15 05:47	75-09-2	H1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		04/15/15 05:47	108-10-1	H1
Methyl-tert-butyl ether	ND	ug/L	1.0	1		04/15/15 05:47	1634-04-4	H1
Naphthalene	ND	ug/L	1.0	1		04/15/15 05:47	91-20-3	H1
Styrene	ND	ug/L	1.0	1		04/15/15 05:47	100-42-5	H1
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/15 05:47	630-20-6	H1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		04/15/15 05:47	79-34-5	H1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Sample: MW-33-235 Re-run #2 **Lab ID: 92242145015** Collected: 03/18/15 11:00 Received: 03/20/15 09:45 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		04/15/15 05:47	127-18-4	H1
Toluene	ND	ug/L	1.0	1		04/15/15 05:47	108-88-3	H1
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	87-61-6	H1
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		04/15/15 05:47	120-82-1	H1
1,1,1-Trichloroethane	ND	ug/L	1.0	1		04/15/15 05:47	71-55-6	H1
1,1,2-Trichloroethane	ND	ug/L	1.0	1		04/15/15 05:47	79-00-5	H1
Trichloroethene	ND	ug/L	1.0	1		04/15/15 05:47	79-01-6	H1
Trichlorofluoromethane	ND	ug/L	1.0	1		04/15/15 05:47	75-69-4	H1
1,2,3-Trichloropropane	ND	ug/L	1.0	1		04/15/15 05:47	96-18-4	H1
Vinyl acetate	ND	ug/L	2.0	1		04/15/15 05:47	108-05-4	H1
Vinyl chloride	ND	ug/L	1.0	1		04/15/15 05:47	75-01-4	H1
Xylene (Total)	ND	ug/L	2.0	1		04/15/15 05:47	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		04/15/15 05:47	179601-23-1	H1
o-Xylene	ND	ug/L	1.0	1		04/15/15 05:47	95-47-6	H1
Surrogates								
4-Bromofluorobenzene (S)	102	%	70-130	1		04/15/15 05:47	460-00-4	H5
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		04/15/15 05:47	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		04/15/15 05:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

QC Batch: MSV/30916 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92242145011, 92242145012

METHOD BLANK: 1420365 Matrix: Water
Associated Lab Samples: 92242145011, 92242145012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,1-Dichloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,1-Dichloroethene	ug/L	ND	1.0	03/27/15 17:26	
1,1-Dichloropropene	ug/L	ND	1.0	03/27/15 17:26	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/27/15 17:26	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	03/27/15 17:26	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/27/15 17:26	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
1,2-Dichloroethane	ug/L	ND	1.0	03/27/15 17:26	
1,2-Dichloropropane	ug/L	ND	1.0	03/27/15 17:26	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
1,3-Dichloropropane	ug/L	ND	1.0	03/27/15 17:26	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/27/15 17:26	
2,2-Dichloropropane	ug/L	ND	1.0	03/27/15 17:26	
2-Butanone (MEK)	ug/L	ND	5.0	03/27/15 17:26	
2-Chlorotoluene	ug/L	ND	1.0	03/27/15 17:26	
2-Hexanone	ug/L	ND	5.0	03/27/15 17:26	
4-Chlorotoluene	ug/L	ND	1.0	03/27/15 17:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/27/15 17:26	
Acetone	ug/L	ND	25.0	03/27/15 17:26	
Benzene	ug/L	ND	1.0	03/27/15 17:26	
Bromobenzene	ug/L	ND	1.0	03/27/15 17:26	
Bromochloromethane	ug/L	ND	1.0	03/27/15 17:26	
Bromodichloromethane	ug/L	ND	1.0	03/27/15 17:26	
Bromoform	ug/L	ND	1.0	03/27/15 17:26	
Bromomethane	ug/L	ND	2.0	03/27/15 17:26	
Carbon tetrachloride	ug/L	ND	1.0	03/27/15 17:26	
Chlorobenzene	ug/L	ND	1.0	03/27/15 17:26	
Chloroethane	ug/L	ND	1.0	03/27/15 17:26	
Chloroform	ug/L	ND	1.0	03/27/15 17:26	
Chloromethane	ug/L	ND	1.0	03/27/15 17:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/27/15 17:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/27/15 17:26	
Dibromochloromethane	ug/L	ND	1.0	03/27/15 17:26	
Dibromomethane	ug/L	ND	1.0	03/27/15 17:26	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

METHOD BLANK: 1420365 Matrix: Water
Associated Lab Samples: 92242145011, 92242145012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	03/27/15 17:26	
Diisopropyl ether	ug/L	ND	1.0	03/27/15 17:26	
Ethylbenzene	ug/L	ND	1.0	03/27/15 17:26	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/27/15 17:26	
m&p-Xylene	ug/L	ND	2.0	03/27/15 17:26	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/27/15 17:26	
Methylene Chloride	ug/L	4.6	2.0	03/27/15 17:26	C9
Naphthalene	ug/L	ND	1.0	03/27/15 17:26	
o-Xylene	ug/L	ND	1.0	03/27/15 17:26	
p-Isopropyltoluene	ug/L	ND	1.0	03/27/15 17:26	
Styrene	ug/L	ND	1.0	03/27/15 17:26	
Tetrachloroethene	ug/L	ND	1.0	03/27/15 17:26	
Toluene	ug/L	ND	1.0	03/27/15 17:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/27/15 17:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/27/15 17:26	
Trichloroethene	ug/L	ND	1.0	03/27/15 17:26	
Trichlorofluoromethane	ug/L	ND	1.0	03/27/15 17:26	
Vinyl acetate	ug/L	ND	2.0	03/27/15 17:26	
Vinyl chloride	ug/L	ND	1.0	03/27/15 17:26	
Xylene (Total)	ug/L	ND	2.0	03/27/15 17:26	
1,2-Dichloroethane-d4 (S)	%	101	70-130	03/27/15 17:26	
4-Bromofluorobenzene (S)	%	98	70-130	03/27/15 17:26	
Toluene-d8 (S)	%	100	70-130	03/27/15 17:26	

LABORATORY CONTROL SAMPLE: 1420366

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.6	107	70-130	
1,1,1-Trichloroethane	ug/L	50	54.4	109	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.4	95	70-130	
1,1,2-Trichloroethane	ug/L	50	48.7	97	70-130	
1,1-Dichloroethane	ug/L	50	47.8	96	70-130	
1,1-Dichloroethene	ug/L	50	51.8	104	70-132	
1,1-Dichloropropene	ug/L	50	58.4	117	70-130	
1,2,3-Trichlorobenzene	ug/L	50	50.8	102	70-135	
1,2,3-Trichloropropane	ug/L	50	47.1	94	70-130	
1,2,4-Trichlorobenzene	ug/L	50	51.2	102	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	48.2	96	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	50.6	101	70-130	
1,2-Dichlorobenzene	ug/L	50	49.3	99	70-130	
1,2-Dichloroethane	ug/L	50	46.3	93	70-130	
1,2-Dichloropropane	ug/L	50	47.9	96	70-130	
1,3-Dichlorobenzene	ug/L	50	48.5	97	70-130	
1,3-Dichloropropane	ug/L	50	48.4	97	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

LABORATORY CONTROL SAMPLE: 1420366

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	49.3	99	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1440	144	71-125	L3
2,2-Dichloropropane	ug/L	50	52.7	105	58-145	
2-Butanone (MEK)	ug/L	100	95.3	95	70-145	
2-Chlorotoluene	ug/L	50	49.8	100	70-130	
2-Hexanone	ug/L	100	102	102	70-144	
4-Chlorotoluene	ug/L	50	49.0	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.1	99	70-140	
Acetone	ug/L	100	92.0	92	50-175	
Benzene	ug/L	50	51.1	102	70-130	
Bromobenzene	ug/L	50	46.3	93	70-130	
Bromochloromethane	ug/L	50	49.6	99	70-130	
Bromodichloromethane	ug/L	50	46.2	92	70-130	
Bromoform	ug/L	50	42.8	86	70-130	
Bromomethane	ug/L	50	61.5	123	54-130	
Carbon tetrachloride	ug/L	50	49.3	99	70-132	
Chlorobenzene	ug/L	50	48.1	96	70-130	
Chloroethane	ug/L	50	44.3	89	64-134	
Chloroform	ug/L	50	44.2	88	70-130	
Chloromethane	ug/L	50	48.7	97	64-130	
cis-1,2-Dichloroethene	ug/L	50	49.3	99	70-131	
cis-1,3-Dichloropropene	ug/L	50	52.0	104	70-130	
Dibromochloromethane	ug/L	50	48.9	98	70-130	
Dibromomethane	ug/L	50	49.0	98	70-131	
Dichlorodifluoromethane	ug/L	50	52.2	104	56-130	
Diisopropyl ether	ug/L	50	46.3	93	70-130	
Ethylbenzene	ug/L	50	50.9	102	70-130	
Hexachloro-1,3-butadiene	ug/L	50	55.8	112	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	46.7	93	70-130	
Methylene Chloride	ug/L	50	50.1	100	63-130	
Naphthalene	ug/L	50	51.7	103	70-138	
o-Xylene	ug/L	50	48.7	97	70-130	
p-Isopropyltoluene	ug/L	50	52.9	106	70-130	
Styrene	ug/L	50	51.2	102	70-130	
Tetrachloroethene	ug/L	50	55.5	111	70-130	
Toluene	ug/L	50	49.5	99	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.0	98	70-130	
trans-1,3-Dichloropropene	ug/L	50	54.6	109	70-132	
Trichloroethene	ug/L	50	50.5	101	70-130	
Trichlorofluoromethane	ug/L	50	46.8	94	62-133	
Vinyl acetate	ug/L	100	89.7	90	66-157	
Vinyl chloride	ug/L	50	51.4	103	50-150	
Xylene (Total)	ug/L	150	149	100	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

MATRIX SPIKE SAMPLE: 1420367

Parameter	Units	92242536004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.5	108	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	24.8	124	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.4	102	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	20.5	103	70-130	
1,1-Dichloroethane	ug/L	ND	20	21.4	107	70-130	
1,1-Dichloroethene	ug/L	ND	20	24.4	122	70-166	
1,1-Dichloropropene	ug/L	ND	20	26.2	131	70-130	M0
1,2,3-Trichlorobenzene	ug/L	ND	20	20.4	102	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	19.8	99	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.7	104	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	19.2	96	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20.7	104	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	20.5	103	70-130	
1,2-Dichloroethane	ug/L	ND	20	20.5	103	70-130	
1,2-Dichloropropane	ug/L	ND	20	20.6	103	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	20.3	102	70-130	
1,3-Dichloropropane	ug/L	ND	20	20.0	100	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	20.6	103	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	156	400	689	133	70-130	M0
2,2-Dichloropropane	ug/L	ND	20	24.5	123	70-130	
2-Butanone (MEK)	ug/L	ND	40	40.5	101	70-130	
2-Chlorotoluene	ug/L	ND	20	20.8	104	70-130	
2-Hexanone	ug/L	ND	40	42.0	105	70-130	
4-Chlorotoluene	ug/L	ND	20	20.8	104	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	41.1	103	70-130	
Acetone	ug/L	ND	40	38.7	97	70-130	
Benzene	ug/L	ND	20	22.1	110	70-148	
Bromobenzene	ug/L	ND	20	18.7	93	70-130	
Bromochloromethane	ug/L	ND	20	21.8	109	70-130	
Bromodichloromethane	ug/L	ND	20	18.9	95	70-130	
Bromoform	ug/L	ND	20	16.7	84	70-130	
Bromomethane	ug/L	ND	20	22.2	111	70-130	
Carbon tetrachloride	ug/L	ND	20	23.6	118	70-130	
Chlorobenzene	ug/L	ND	20	20.4	102	70-146	
Chloroethane	ug/L	ND	20	21.3	106	70-130	
Chloroform	ug/L	ND	20	19.5	97	70-130	
Chloromethane	ug/L	ND	20	23.0	115	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	21.8	109	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	19.5	98	70-130	
Dibromochloromethane	ug/L	ND	20	18.3	92	70-130	
Dibromomethane	ug/L	ND	20	20.9	104	70-130	
Dichlorodifluoromethane	ug/L	ND	20	25.1	126	70-130	
Diisopropyl ether	ug/L	ND	20	20.3	101	70-130	
Ethylbenzene	ug/L	ND	20	21.9	109	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	22.6	113	70-130	
m&p-Xylene	ug/L	ND	40	43.3	108	70-130	
Methyl-tert-butyl ether	ug/L	ND	20	20.0	100	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

MATRIX SPIKE SAMPLE: 1420367

Parameter	Units	92242536004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	20.7	103	70-130	
Naphthalene	ug/L	ND	20	20.0	100	70-130	
o-Xylene	ug/L	ND	20	20.6	103	70-130	
p-Isopropyltoluene	ug/L	ND	20	22.3	112	70-130	
Styrene	ug/L	ND	20	21.2	106	70-130	
Tetrachloroethene	ug/L	ND	20	24.2	121	70-130	
Toluene	ug/L	ND	20	21.8	109	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	22.2	111	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	19.8	99	70-130	
Trichloroethene	ug/L	ND	20	21.6	108	69-151	
Trichlorofluoromethane	ug/L	ND	20	23.2	116	70-130	
Vinyl acetate	ug/L	ND	40	48.2	120	70-130	
Vinyl chloride	ug/L	ND	20	23.6	118	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				102	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 1420368

Parameter	Units	92242536005 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		
1,1,1-Trichloroethane	ug/L	ND	ND		
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		
1,1,2-Trichloroethane	ug/L	ND	ND		
1,1-Dichloroethane	ug/L	ND	ND		
1,1-Dichloroethene	ug/L	ND	ND		
1,1-Dichloropropene	ug/L	ND	ND		
1,2,3-Trichlorobenzene	ug/L	ND	ND		
1,2,3-Trichloropropane	ug/L	ND	ND		
1,2,4-Trichlorobenzene	ug/L	ND	ND		
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		
1,2-Dibromoethane (EDB)	ug/L	ND	ND		
1,2-Dichlorobenzene	ug/L	ND	ND		
1,2-Dichloroethane	ug/L	ND	ND		
1,2-Dichloropropane	ug/L	ND	ND		
1,3-Dichlorobenzene	ug/L	ND	ND		
1,3-Dichloropropane	ug/L	ND	ND		
1,4-Dichlorobenzene	ug/L	ND	ND		
1,4-Dioxane (p-Dioxane)	ug/L	92.8J	ND		
2,2-Dichloropropane	ug/L	ND	ND		
2-Butanone (MEK)	ug/L	ND	ND		
2-Chlorotoluene	ug/L	ND	ND		
2-Hexanone	ug/L	ND	ND		
4-Chlorotoluene	ug/L	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

SAMPLE DUPLICATE: 1420368

Parameter	Units	92242536005 Result	Dup Result	RPD	Qualifiers
Acetone	ug/L	ND	ND		
Benzene	ug/L	ND	ND		
Bromobenzene	ug/L	ND	ND		
Bromochloromethane	ug/L	ND	ND		
Bromodichloromethane	ug/L	ND	ND		
Bromoform	ug/L	ND	ND		
Bromomethane	ug/L	ND	ND		
Carbon tetrachloride	ug/L	ND	ND		
Chlorobenzene	ug/L	ND	ND		
Chloroethane	ug/L	ND	ND		
Chloroform	ug/L	ND	ND		
Chloromethane	ug/L	ND	ND		
cis-1,2-Dichloroethene	ug/L	ND	ND		
cis-1,3-Dichloropropene	ug/L	ND	ND		
Dibromochloromethane	ug/L	ND	ND		
Dibromomethane	ug/L	ND	ND		
Dichlorodifluoromethane	ug/L	ND	ND		
Diisopropyl ether	ug/L	ND	ND		
Ethylbenzene	ug/L	ND	ND		
Hexachloro-1,3-butadiene	ug/L	ND	ND		
m&p-Xylene	ug/L	ND	ND		
Methyl-tert-butyl ether	ug/L	ND	ND		
Methylene Chloride	ug/L	ND	ND		
Naphthalene	ug/L	ND	ND		
o-Xylene	ug/L	ND	ND		
p-Isopropyltoluene	ug/L	ND	ND		
Styrene	ug/L	ND	ND		
Tetrachloroethene	ug/L	ND	ND		
Toluene	ug/L	ND	ND		
trans-1,2-Dichloroethene	ug/L	ND	ND		
trans-1,3-Dichloropropene	ug/L	ND	ND		
Trichloroethene	ug/L	ND	ND		
Trichlorofluoromethane	ug/L	ND	ND		
Vinyl acetate	ug/L	ND	ND		
Vinyl chloride	ug/L	ND	ND		
Xylene (Total)	ug/L	ND	ND		
1,2-Dichloroethane-d4 (S)	%	101	101	0	
4-Bromofluorobenzene (S)	%	98	101	3	
Toluene-d8 (S)	%	101	102	1	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

QC Batch: MSV/30922 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92242145001, 92242145002, 92242145003, 92242145004, 92242145005, 92242145006, 92242145007, 92242145008, 92242145010, 92242145013

METHOD BLANK: 1420413 Matrix: Water
Associated Lab Samples: 92242145001, 92242145002, 92242145003, 92242145004, 92242145005, 92242145006, 92242145007, 92242145008, 92242145010, 92242145013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,1-Dichloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,1-Dichloroethene	ug/L	ND	1.0	03/28/15 03:03	
1,1-Dichloropropene	ug/L	ND	1.0	03/28/15 03:03	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/28/15 03:03	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	03/28/15 03:03	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/28/15 03:03	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
1,2-Dichloroethane	ug/L	ND	1.0	03/28/15 03:03	
1,2-Dichloropropane	ug/L	ND	1.0	03/28/15 03:03	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
1,3-Dichloropropane	ug/L	ND	1.0	03/28/15 03:03	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/28/15 03:03	
2,2-Dichloropropane	ug/L	ND	1.0	03/28/15 03:03	
2-Butanone (MEK)	ug/L	ND	5.0	03/28/15 03:03	
2-Chlorotoluene	ug/L	ND	1.0	03/28/15 03:03	
2-Hexanone	ug/L	ND	5.0	03/28/15 03:03	
4-Chlorotoluene	ug/L	ND	1.0	03/28/15 03:03	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/28/15 03:03	
Acetone	ug/L	ND	25.0	03/28/15 03:03	
Benzene	ug/L	ND	1.0	03/28/15 03:03	
Bromobenzene	ug/L	ND	1.0	03/28/15 03:03	
Bromochloromethane	ug/L	ND	1.0	03/28/15 03:03	
Bromodichloromethane	ug/L	ND	1.0	03/28/15 03:03	
Bromoform	ug/L	ND	1.0	03/28/15 03:03	
Bromomethane	ug/L	ND	2.0	03/28/15 03:03	
Carbon tetrachloride	ug/L	ND	1.0	03/28/15 03:03	
Chlorobenzene	ug/L	ND	1.0	03/28/15 03:03	
Chloroethane	ug/L	ND	1.0	03/28/15 03:03	
Chloroform	ug/L	ND	1.0	03/28/15 03:03	
Chloromethane	ug/L	ND	1.0	03/28/15 03:03	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/28/15 03:03	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/28/15 03:03	
Dibromochloromethane	ug/L	ND	1.0	03/28/15 03:03	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

METHOD BLANK: 1420413 Matrix: Water

Associated Lab Samples: 92242145001, 92242145002, 92242145003, 92242145004, 92242145005, 92242145006, 92242145007, 92242145008, 92242145010, 92242145013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	03/28/15 03:03	
Dichlorodifluoromethane	ug/L	ND	1.0	03/28/15 03:03	
Diisopropyl ether	ug/L	ND	1.0	03/28/15 03:03	
Ethylbenzene	ug/L	ND	1.0	03/28/15 03:03	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/28/15 03:03	
m&p-Xylene	ug/L	ND	2.0	03/28/15 03:03	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/28/15 03:03	
Methylene Chloride	ug/L	4.6	2.0	03/28/15 03:03	C9
Naphthalene	ug/L	ND	1.0	03/28/15 03:03	
o-Xylene	ug/L	ND	1.0	03/28/15 03:03	
p-Isopropyltoluene	ug/L	ND	1.0	03/28/15 03:03	
Styrene	ug/L	ND	1.0	03/28/15 03:03	
Tetrachloroethene	ug/L	ND	1.0	03/28/15 03:03	
Toluene	ug/L	ND	1.0	03/28/15 03:03	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/28/15 03:03	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/28/15 03:03	
Trichloroethene	ug/L	ND	1.0	03/28/15 03:03	
Trichlorofluoromethane	ug/L	ND	1.0	03/28/15 03:03	
Vinyl acetate	ug/L	ND	2.0	03/28/15 03:03	
Vinyl chloride	ug/L	ND	1.0	03/28/15 03:03	
Xylene (Total)	ug/L	ND	2.0	03/28/15 03:03	
1,2-Dichloroethane-d4 (S)	%	101	70-130	03/28/15 03:03	
4-Bromofluorobenzene (S)	%	99	70-130	03/28/15 03:03	
Toluene-d8 (S)	%	100	70-130	03/28/15 03:03	

LABORATORY CONTROL SAMPLE: 1420414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.1	100	70-130	
1,1,1-Trichloroethane	ug/L	50	52.2	104	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	43.7	87	70-130	
1,1,2-Trichloroethane	ug/L	50	47.5	95	70-130	
1,1-Dichloroethane	ug/L	50	46.2	92	70-130	
1,1-Dichloroethene	ug/L	50	50.6	101	70-132	
1,1-Dichloropropene	ug/L	50	55.5	111	70-130	
1,2,3-Trichlorobenzene	ug/L	50	47.5	95	70-135	
1,2,3-Trichloropropane	ug/L	50	46.1	92	70-130	
1,2,4-Trichlorobenzene	ug/L	50	47.1	94	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	46.1	92	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	48.0	96	70-130	
1,2-Dichlorobenzene	ug/L	50	46.5	93	70-130	
1,2-Dichloroethane	ug/L	50	45.5	91	70-130	
1,2-Dichloropropane	ug/L	50	46.3	93	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

LABORATORY CONTROL SAMPLE: 1420414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,3-Dichlorobenzene	ug/L	50	45.4	91	70-130	
1,3-Dichloropropane	ug/L	50	46.3	93	70-130	
1,4-Dichlorobenzene	ug/L	50	45.8	92	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1070	107	71-125	
2,2-Dichloropropane	ug/L	50	44.8	90	58-145	
2-Butanone (MEK)	ug/L	100	92.4	92	70-145	
2-Chlorotoluene	ug/L	50	45.7	91	70-130	
2-Hexanone	ug/L	100	99.4	99	70-144	
4-Chlorotoluene	ug/L	50	45.9	92	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.0	98	70-140	
Acetone	ug/L	100	92.4	92	50-175	
Benzene	ug/L	50	48.9	98	70-130	
Bromobenzene	ug/L	50	41.6	83	70-130	
Bromochloromethane	ug/L	50	48.0	96	70-130	
Bromodichloromethane	ug/L	50	43.7	87	70-130	
Bromoform	ug/L	50	35.2	70	70-130	
Bromomethane	ug/L	50	24.8	50	54-130	L0
Carbon tetrachloride	ug/L	50	45.7	91	70-132	
Chlorobenzene	ug/L	50	46.0	92	70-130	
Chloroethane	ug/L	50	43.8	88	64-134	
Chloroform	ug/L	50	42.7	85	70-130	
Chloromethane	ug/L	50	42.4	85	64-130	
cis-1,2-Dichloroethene	ug/L	50	47.6	95	70-131	
cis-1,3-Dichloropropene	ug/L	50	41.6	83	70-130	
Dibromochloromethane	ug/L	50	43.8	88	70-130	
Dibromomethane	ug/L	50	47.3	95	70-131	
Dichlorodifluoromethane	ug/L	50	49.4	99	56-130	
Diisopropyl ether	ug/L	50	45.2	90	70-130	
Ethylbenzene	ug/L	50	48.1	96	70-130	
Hexachloro-1,3-butadiene	ug/L	50	51.5	103	70-130	
m&p-Xylene	ug/L	100	95.6	96	70-130	
Methyl-tert-butyl ether	ug/L	50	45.2	90	70-130	
Methylene Chloride	ug/L	50	49.2	98	63-130	
Naphthalene	ug/L	50	48.1	96	70-138	
o-Xylene	ug/L	50	46.2	92	70-130	
p-Isopropyltoluene	ug/L	50	48.6	97	70-130	
Styrene	ug/L	50	48.5	97	70-130	
Tetrachloroethene	ug/L	50	51.3	103	70-130	
Toluene	ug/L	50	47.7	95	70-130	
trans-1,2-Dichloroethene	ug/L	50	46.9	94	70-130	
trans-1,3-Dichloropropene	ug/L	50	40.4	81	70-132	
Trichloroethene	ug/L	50	50.3	101	70-130	
Trichlorofluoromethane	ug/L	50	46.8	94	62-133	
Vinyl acetate	ug/L	100	70.1	70	66-157	
Vinyl chloride	ug/L	50	48.8	98	50-150	
Xylene (Total)	ug/L	150	142	95	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

LABORATORY CONTROL SAMPLE: 1420414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1420415 1420416

Parameter	Units	92242145002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	19.8	21.5	99	108	70-130	8	
1,1,1-Trichloroethane	ug/L	ND	20	20	23.1	25.0	116	125	70-130	8	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.6	20.7	93	104	70-130	11	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.9	20.7	100	104	70-130	4	
1,1-Dichloroethane	ug/L	ND	20	20	20.4	22.3	100	110	70-130	9	
1,1-Dichloroethene	ug/L	10.6	20	20	33.0	36.3	112	128	70-166	10	
1,1-Dichloropropene	ug/L	ND	20	20	24.7	27.2	123	136	70-130	10	M0
1,2,3-Trichlorobenzene	ug/L	ND	20	20	18.4	20.3	92	102	70-130	10	
1,2,3-Trichloropropane	ug/L	ND	20	20	18.5	19.6	92	98	70-130	6	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	19.0	20.7	95	104	70-130	9	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	17.9	18.7	89	93	70-130	5	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.1	20.9	95	105	70-130	9	
1,2-Dichlorobenzene	ug/L	ND	20	20	19.0	20.7	95	104	70-130	9	
1,2-Dichloroethane	ug/L	ND	20	20	18.9	20.9	94	104	70-130	10	
1,2-Dichloropropane	ug/L	ND	20	20	19.5	21.0	97	105	70-130	8	
1,3-Dichlorobenzene	ug/L	ND	20	20	18.7	20.8	94	104	70-130	11	
1,3-Dichloropropane	ug/L	ND	20	20	18.6	20.3	93	101	70-130	8	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.0	20.8	95	104	70-130	9	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	400	514	579	128	145	70-130	12	M0
2,2-Dichloropropane	ug/L	ND	20	20	22.4	24.5	112	123	70-130	9	
2-Butanone (MEK)	ug/L	ND	40	40	38.0	40.5	95	101	70-130	6	
2-Chlorotoluene	ug/L	ND	20	20	19.6	21.0	98	105	70-130	7	
2-Hexanone	ug/L	ND	40	40	37.9	41.2	95	103	70-130	8	
4-Chlorotoluene	ug/L	ND	20	20	19.3	21.1	97	105	70-130	9	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	38.9	40.7	97	102	70-130	5	
Acetone	ug/L	ND	40	40	35.0	39.6	87	99	70-130	12	
Benzene	ug/L	ND	20	20	21.0	22.7	105	114	70-148	8	
Bromobenzene	ug/L	ND	20	20	17.6	21.0	88	105	70-130	17	
Bromochloromethane	ug/L	ND	20	20	20.0	22.3	100	111	70-130	11	
Bromodichloromethane	ug/L	ND	20	20	17.6	18.7	88	94	70-130	6	
Bromoform	ug/L	ND	20	20	16.0	16.6	80	83	70-130	3	
Bromomethane	ug/L	ND	20	20	21.4	25.2	107	126	70-130	16	
Carbon tetrachloride	ug/L	ND	20	20	21.9	23.7	110	118	70-130	8	
Chlorobenzene	ug/L	ND	20	20	19.0	21.1	95	105	70-146	11	
Chloroethane	ug/L	ND	20	20	20.0	22.2	100	111	70-130	11	
Chloroform	ug/L	ND	20	20	18.0	19.8	90	99	70-130	9	
Chloromethane	ug/L	ND	20	20	21.8	23.4	109	117	70-130	7	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.5	22.6	102	113	70-130	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1420415 1420416

Parameter	Units	92242145002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.4	19.5	92	98	70-130	6	
Dibromochloromethane	ug/L	ND	20	20	16.9	18.2	84	91	70-130	7	
Dibromomethane	ug/L	ND	20	20	19.3	20.9	97	104	70-130	8	
Dichlorodifluoromethane	ug/L	ND	20	20	23.7	25.6	119	128	70-130	8	
Diisopropyl ether	ug/L	ND	20	20	18.9	20.7	94	104	70-130	9	
Ethylbenzene	ug/L	ND	20	20	20.3	22.2	102	111	70-130	9	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	19.7	21.8	98	109	70-130	10	
m&p-Xylene	ug/L	ND	40	40	40.5	44.4	101	111	70-130	9	
Methyl-tert-butyl ether	ug/L	ND	20	20	18.6	20.5	93	102	70-130	9	
Methylene Chloride	ug/L	ND	20	20	19.0	21.1	95	105	70-130	10	
Naphthalene	ug/L	ND	20	20	18.5	19.7	93	99	70-130	6	
o-Xylene	ug/L	ND	20	20	19.2	21.2	96	106	70-130	10	
p-Isopropyltoluene	ug/L	ND	20	20	20.4	22.3	102	112	70-130	9	
Styrene	ug/L	ND	20	20	19.6	21.7	98	108	70-130	10	
Tetrachloroethene	ug/L	ND	20	20	22.3	24.7	111	124	70-130	10	
Toluene	ug/L	ND	20	20	20.3	22.0	101	110	70-155	8	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.7	22.7	104	114	70-130	9	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.8	19.5	89	97	70-130	9	
Trichloroethene	ug/L	ND	20	20	20.6	22.3	103	111	69-151	8	
Trichlorofluoromethane	ug/L	ND	20	20	21.5	23.8	107	119	70-130	10	
Vinyl acetate	ug/L	ND	40	40	44.1	47.4	110	119	70-130	7	
Vinyl chloride	ug/L	ND	20	20	22.5	24.8	113	124	70-130	10	
1,2-Dichloroethane-d4 (S)	%						98	99	70-130		
4-Bromofluorobenzene (S)	%						102	102	70-130		
Toluene-d8 (S)	%						100	99	70-130		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

QC Batch: MSV/30923
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92242145009

METHOD BLANK: 1420430
Matrix: Water
Associated Lab Samples: 92242145009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,1-Dichloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,1-Dichloroethene	ug/L	ND	1.0	03/28/15 03:20	
1,1-Dichloropropene	ug/L	ND	1.0	03/28/15 03:20	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
1,2,3-Trichloropropane	ug/L	ND	1.0	03/28/15 03:20	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	03/28/15 03:20	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/28/15 03:20	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
1,2-Dichloroethane	ug/L	ND	1.0	03/28/15 03:20	
1,2-Dichloropropane	ug/L	ND	1.0	03/28/15 03:20	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
1,3-Dichloropropane	ug/L	ND	1.0	03/28/15 03:20	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	03/28/15 03:20	
2,2-Dichloropropane	ug/L	ND	1.0	03/28/15 03:20	
2-Butanone (MEK)	ug/L	ND	5.0	03/28/15 03:20	
2-Chlorotoluene	ug/L	ND	1.0	03/28/15 03:20	
2-Hexanone	ug/L	ND	5.0	03/28/15 03:20	
4-Chlorotoluene	ug/L	ND	1.0	03/28/15 03:20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/28/15 03:20	
Acetone	ug/L	ND	25.0	03/28/15 03:20	
Benzene	ug/L	ND	1.0	03/28/15 03:20	
Bromobenzene	ug/L	ND	1.0	03/28/15 03:20	
Bromochloromethane	ug/L	ND	1.0	03/28/15 03:20	
Bromodichloromethane	ug/L	ND	1.0	03/28/15 03:20	
Bromoform	ug/L	ND	1.0	03/28/15 03:20	
Bromomethane	ug/L	ND	2.0	03/28/15 03:20	
Carbon tetrachloride	ug/L	ND	1.0	03/28/15 03:20	
Chlorobenzene	ug/L	ND	1.0	03/28/15 03:20	
Chloroethane	ug/L	ND	1.0	03/28/15 03:20	
Chloroform	ug/L	ND	1.0	03/28/15 03:20	
Chloromethane	ug/L	ND	1.0	03/28/15 03:20	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/28/15 03:20	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/28/15 03:20	
Dibromochloromethane	ug/L	ND	1.0	03/28/15 03:20	
Dibromomethane	ug/L	ND	1.0	03/28/15 03:20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

METHOD BLANK: 1420430 Matrix: Water
Associated Lab Samples: 92242145009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	03/28/15 03:20	
Diisopropyl ether	ug/L	ND	1.0	03/28/15 03:20	
Ethylbenzene	ug/L	ND	1.0	03/28/15 03:20	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	03/28/15 03:20	
m&p-Xylene	ug/L	ND	2.0	03/28/15 03:20	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/28/15 03:20	
Methylene Chloride	ug/L	4.8	2.0	03/28/15 03:20	C9
Naphthalene	ug/L	ND	1.0	03/28/15 03:20	
o-Xylene	ug/L	ND	1.0	03/28/15 03:20	
p-Isopropyltoluene	ug/L	ND	1.0	03/28/15 03:20	
Styrene	ug/L	ND	1.0	03/28/15 03:20	
Tetrachloroethene	ug/L	ND	1.0	03/28/15 03:20	
Toluene	ug/L	ND	1.0	03/28/15 03:20	
trans-1,2-Dichloroethene	ug/L	ND	1.0	03/28/15 03:20	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/28/15 03:20	
Trichloroethene	ug/L	ND	1.0	03/28/15 03:20	
Trichlorofluoromethane	ug/L	ND	1.0	03/28/15 03:20	
Vinyl acetate	ug/L	ND	2.0	03/28/15 03:20	
Vinyl chloride	ug/L	ND	1.0	03/28/15 03:20	
Xylene (Total)	ug/L	ND	2.0	03/28/15 03:20	
1,2-Dichloroethane-d4 (S)	%	102	70-130	03/28/15 03:20	
4-Bromofluorobenzene (S)	%	99	70-130	03/28/15 03:20	
Toluene-d8 (S)	%	100	70-130	03/28/15 03:20	

LABORATORY CONTROL SAMPLE: 1420431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.9	100	70-130	
1,1,1-Trichloroethane	ug/L	50	52.5	105	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	44.4	89	70-130	
1,1,2-Trichloroethane	ug/L	50	48.2	96	70-130	
1,1-Dichloroethane	ug/L	50	46.7	93	70-130	
1,1-Dichloroethene	ug/L	50	50.6	101	70-132	
1,1-Dichloropropene	ug/L	50	55.5	111	70-130	
1,2,3-Trichlorobenzene	ug/L	50	46.9	94	70-135	
1,2,3-Trichloropropane	ug/L	50	46.5	93	70-130	
1,2,4-Trichlorobenzene	ug/L	50	46.9	94	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	46.3	93	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	49.0	98	70-130	
1,2-Dichlorobenzene	ug/L	50	46.6	93	70-130	
1,2-Dichloroethane	ug/L	50	46.1	92	70-130	
1,2-Dichloropropane	ug/L	50	46.8	94	70-130	
1,3-Dichlorobenzene	ug/L	50	45.6	91	70-130	
1,3-Dichloropropane	ug/L	50	46.7	93	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

LABORATORY CONTROL SAMPLE: 1420431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	45.7	91	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1130	113	71-125	
2,2-Dichloropropane	ug/L	50	45.2	90	58-145	
2-Butanone (MEK)	ug/L	100	95.1	95	70-145	
2-Chlorotoluene	ug/L	50	46.0	92	70-130	
2-Hexanone	ug/L	100	102	102	70-144	
4-Chlorotoluene	ug/L	50	45.7	91	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.5	99	70-140	
Acetone	ug/L	100	95.5	95	50-175	
Benzene	ug/L	50	48.8	98	70-130	
Bromobenzene	ug/L	50	42.5	85	70-130	
Bromochloromethane	ug/L	50	48.5	97	70-130	
Bromodichloromethane	ug/L	50	43.5	87	70-130	
Bromoform	ug/L	50	35.7	71	70-130	
Bromomethane	ug/L	50	28.0	56	54-130	
Carbon tetrachloride	ug/L	50	46.1	92	70-132	
Chlorobenzene	ug/L	50	45.7	91	70-130	
Chloroethane	ug/L	50	44.0	88	64-134	
Chloroform	ug/L	50	42.7	85	70-130	
Chloromethane	ug/L	50	46.9	94	64-130	
cis-1,2-Dichloroethene	ug/L	50	48.2	96	70-131	
cis-1,3-Dichloropropene	ug/L	50	41.7	83	70-130	
Dibromochloromethane	ug/L	50	44.6	89	70-130	
Dibromomethane	ug/L	50	47.8	96	70-131	
Dichlorodifluoromethane	ug/L	50	49.0	98	56-130	
Diisopropyl ether	ug/L	50	46.1	92	70-130	
Ethylbenzene	ug/L	50	47.6	95	70-130	
Hexachloro-1,3-butadiene	ug/L	50	49.0	98	70-130	
m&p-Xylene	ug/L	100	94.8	95	70-130	
Methyl-tert-butyl ether	ug/L	50	46.1	92	70-130	
Methylene Chloride	ug/L	50	50.3	101	63-130	
Naphthalene	ug/L	50	48.5	97	70-138	
o-Xylene	ug/L	50	45.8	92	70-130	
p-Isopropyltoluene	ug/L	50	47.8	96	70-130	
Styrene	ug/L	50	48.4	97	70-130	
Tetrachloroethene	ug/L	50	51.6	103	70-130	
Toluene	ug/L	50	47.8	96	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	70-130	
trans-1,3-Dichloropropene	ug/L	50	40.7	81	70-132	
Trichloroethene	ug/L	50	50.2	100	70-130	
Trichlorofluoromethane	ug/L	50	46.5	93	62-133	
Vinyl acetate	ug/L	100	70.0	70	66-157	
Vinyl chloride	ug/L	50	48.7	97	50-150	
Xylene (Total)	ug/L	150	141	94	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

QC Batch: MSV/31229 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92242145014, 92242145015

METHOD BLANK: 1436614 Matrix: Water
Associated Lab Samples: 92242145014, 92242145015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,1,1-Trichloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,1-Dichloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,1-Dichloroethene	ug/L	ND	1.0	04/14/15 10:46	
1,1-Dichloropropene	ug/L	ND	1.0	04/14/15 10:46	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
1,2,3-Trichloropropane	ug/L	ND	1.0	04/14/15 10:46	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	04/14/15 10:46	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	04/14/15 10:46	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
1,2-Dichloroethane	ug/L	ND	1.0	04/14/15 10:46	
1,2-Dichloropropane	ug/L	ND	1.0	04/14/15 10:46	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
1,3-Dichloropropane	ug/L	ND	1.0	04/14/15 10:46	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	04/14/15 10:46	
2,2-Dichloropropane	ug/L	ND	1.0	04/14/15 10:46	
2-Butanone (MEK)	ug/L	ND	5.0	04/14/15 10:46	
2-Chlorotoluene	ug/L	ND	1.0	04/14/15 10:46	
2-Hexanone	ug/L	ND	5.0	04/14/15 10:46	
4-Chlorotoluene	ug/L	ND	1.0	04/14/15 10:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	04/14/15 10:46	
Acetone	ug/L	ND	25.0	04/14/15 10:46	
Benzene	ug/L	ND	1.0	04/14/15 10:46	
Bromobenzene	ug/L	ND	1.0	04/14/15 10:46	
Bromochloromethane	ug/L	ND	1.0	04/14/15 10:46	
Bromodichloromethane	ug/L	ND	1.0	04/14/15 10:46	
Bromoform	ug/L	ND	1.0	04/14/15 10:46	
Bromomethane	ug/L	ND	2.0	04/14/15 10:46	
Carbon tetrachloride	ug/L	ND	1.0	04/14/15 10:46	
Chlorobenzene	ug/L	ND	1.0	04/14/15 10:46	
Chloroethane	ug/L	ND	1.0	04/14/15 10:46	
Chloroform	ug/L	ND	1.0	04/14/15 10:46	
Chloromethane	ug/L	ND	1.0	04/14/15 10:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/14/15 10:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/14/15 10:46	
Dibromochloromethane	ug/L	ND	1.0	04/14/15 10:46	
Dibromomethane	ug/L	ND	1.0	04/14/15 10:46	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

METHOD BLANK: 1436614 Matrix: Water
Associated Lab Samples: 92242145014, 92242145015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	04/14/15 10:46	
Diisopropyl ether	ug/L	ND	1.0	04/14/15 10:46	
Ethylbenzene	ug/L	ND	1.0	04/14/15 10:46	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	04/14/15 10:46	
m&p-Xylene	ug/L	ND	2.0	04/14/15 10:46	
Methyl-tert-butyl ether	ug/L	ND	1.0	04/14/15 10:46	
Methylene Chloride	ug/L	ND	2.0	04/14/15 10:46	
Naphthalene	ug/L	ND	1.0	04/14/15 10:46	
o-Xylene	ug/L	ND	1.0	04/14/15 10:46	
p-Isopropyltoluene	ug/L	ND	1.0	04/14/15 10:46	
Styrene	ug/L	ND	1.0	04/14/15 10:46	
Tetrachloroethene	ug/L	ND	1.0	04/14/15 10:46	
Toluene	ug/L	ND	1.0	04/14/15 10:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/14/15 10:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/14/15 10:46	
Trichloroethene	ug/L	ND	1.0	04/14/15 10:46	
Trichlorofluoromethane	ug/L	ND	1.0	04/14/15 10:46	
Vinyl acetate	ug/L	ND	2.0	04/14/15 10:46	
Vinyl chloride	ug/L	ND	1.0	04/14/15 10:46	
Xylene (Total)	ug/L	ND	2.0	04/14/15 10:46	
1,2-Dichloroethane-d4 (S)	%	104	70-130	04/14/15 10:46	
4-Bromofluorobenzene (S)	%	102	70-130	04/14/15 10:46	
Toluene-d8 (S)	%	98	70-130	04/14/15 10:46	

LABORATORY CONTROL SAMPLE: 1436615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.0	106	70-130	
1,1,1-Trichloroethane	ug/L	50	52.0	104	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	53.3	107	70-130	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	46.7	93	70-130	
1,1-Dichloroethene	ug/L	50	45.3	91	70-132	
1,1-Dichloropropene	ug/L	50	50.5	101	70-130	
1,2,3-Trichlorobenzene	ug/L	50	55.3	111	70-135	
1,2,3-Trichloropropane	ug/L	50	52.6	105	70-130	
1,2,4-Trichlorobenzene	ug/L	50	55.1	110	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	53.7	107	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	53.1	106	70-130	
1,2-Dichlorobenzene	ug/L	50	53.8	108	70-130	
1,2-Dichloroethane	ug/L	50	50.5	101	70-130	
1,2-Dichloropropane	ug/L	50	46.2	92	70-130	
1,3-Dichlorobenzene	ug/L	50	53.5	107	70-130	
1,3-Dichloropropane	ug/L	50	54.1	108	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

LABORATORY CONTROL SAMPLE: 1436615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	53.0	106	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1250	125	71-125	
2,2-Dichloropropane	ug/L	50	49.6	99	58-145	
2-Butanone (MEK)	ug/L	100	99.2	99	70-145	
2-Chlorotoluene	ug/L	50	55.8	112	70-130	
2-Hexanone	ug/L	100	117	117	70-144	
4-Chlorotoluene	ug/L	50	55.4	111	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-140	
Acetone	ug/L	100	102	102	50-175	
Benzene	ug/L	50	49.0	98	70-130	
Bromobenzene	ug/L	50	51.7	103	70-130	
Bromochloromethane	ug/L	50	45.4	91	70-130	
Bromodichloromethane	ug/L	50	47.4	95	70-130	
Bromoform	ug/L	50	46.1	92	70-130	
Bromomethane	ug/L	50	26.3	53	54-130	L0
Carbon tetrachloride	ug/L	50	51.8	104	70-132	
Chlorobenzene	ug/L	50	54.0	108	70-130	
Chloroethane	ug/L	50	39.3	79	64-134	
Chloroform	ug/L	50	45.4	91	70-130	
Chloromethane	ug/L	50	30.7	61	64-130	L0
cis-1,2-Dichloroethene	ug/L	50	47.2	94	70-131	
cis-1,3-Dichloropropene	ug/L	50	49.2	98	70-130	
Dibromochloromethane	ug/L	50	47.6	95	70-130	
Dibromomethane	ug/L	50	48.4	97	70-131	
Dichlorodifluoromethane	ug/L	50	44.1	88	56-130	
Diisopropyl ether	ug/L	50	48.4	97	70-130	
Ethylbenzene	ug/L	50	56.3	113	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.6	101	70-130	
m&p-Xylene	ug/L	100	115	115	70-130	
Methyl-tert-butyl ether	ug/L	50	47.6	95	70-130	
Methylene Chloride	ug/L	50	50.6	101	63-130	
Naphthalene	ug/L	50	50.9	102	70-138	
o-Xylene	ug/L	50	55.6	111	70-130	
p-Isopropyltoluene	ug/L	50	52.9	106	70-130	
Styrene	ug/L	50	53.1	106	70-130	
Tetrachloroethene	ug/L	50	57.6	115	70-130	
Toluene	ug/L	50	50.5	101	70-130	
trans-1,2-Dichloroethene	ug/L	50	45.5	91	70-130	
trans-1,3-Dichloropropene	ug/L	50	52.0	104	70-132	
Trichloroethene	ug/L	50	48.4	97	70-130	
Trichlorofluoromethane	ug/L	50	47.2	94	62-133	
Vinyl acetate	ug/L	100	104	104	66-157	
Vinyl chloride	ug/L	50	40.5	81	50-150	
Xylene (Total)	ug/L	150	170	114	70-130	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Toluene-d8 (S)	%			100	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

QC Batch: MSV/30891 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 92242145001, 92242145002, 92242145003, 92242145004, 92242145005, 92242145006, 92242145007, 92242145008, 92242145009, 92242145010, 92242145011

METHOD BLANK: 1418611 Matrix: Water
Associated Lab Samples: 92242145001, 92242145002, 92242145003, 92242145004, 92242145005, 92242145006, 92242145007, 92242145008, 92242145009, 92242145010, 92242145011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	ND	2.0	03/25/15 10:19	
1,2-Dichloroethane-d4 (S)	%	114	50-150	03/25/15 10:19	
Toluene-d8 (S)	%	102	50-150	03/25/15 10:19	

LABORATORY CONTROL SAMPLE: 1418612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	20	20.3	102	71-125	
1,2-Dichloroethane-d4 (S)	%			111	50-150	
Toluene-d8 (S)	%			104	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1418613 1418614

Parameter	Units	92242145001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	ND	20	20	27.0	26.9	135	134	50-150	0	
1,2-Dichloroethane-d4 (S)	%						109	113	50-150		
Toluene-d8 (S)	%						102	102	50-150		

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

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, Styrene, and Vinyl chloride.

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

C9	Common Laboratory Contaminant.
H1	Analysis conducted outside the EPA method holding time.
H5	Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Kop-Flex 39196.25
Pace Project No.: 92242145

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92242145001	**MW-28-45**	EPA 8260	MSV/30922		
92242145002	**MW-28-210**	EPA 8260	MSV/30922		
92242145003	**MW-100**	EPA 8260	MSV/30922		
92242145004	**MW-31-280**	EPA 8260	MSV/30922		
92242145005	**MW-33-235**	EPA 8260	MSV/30922		
92242145006	**MW-33-295**	EPA 8260	MSV/30922		
92242145007	**MW-35-298**	EPA 8260	MSV/30922		
92242145008	**MW-25-40**	EPA 8260	MSV/30922		
92242145009	**MW-25-130**	EPA 8260	MSV/30923		
92242145010	**MW-25-190**	EPA 8260	MSV/30922		
92242145011	**EB-031915**	EPA 8260	MSV/30916		
92242145012	**TRIP BLANK 1**	EPA 8260	MSV/30916		
92242145013	**TRIP BLANK 2**	EPA 8260	MSV/30922		
92242145014	**MW-33-235 Re-run #1**	EPA 8260	MSV/31229		
92242145015	**MW-33-235 Re-run #2**	EPA 8260	MSV/31229		
92242145001	**MW-28-45**	EPA 8260B Mod.	MSV/30891		
92242145002	**MW-28-210**	EPA 8260B Mod.	MSV/30891		
92242145003	**MW-100**	EPA 8260B Mod.	MSV/30891		
92242145004	**MW-31-280**	EPA 8260B Mod.	MSV/30891		
92242145005	**MW-33-235**	EPA 8260B Mod.	MSV/30891		
92242145006	**MW-33-295**	EPA 8260B Mod.	MSV/30891		
92242145007	**MW-35-298**	EPA 8260B Mod.	MSV/30891		
92242145008	**MW-25-40**	EPA 8260B Mod.	MSV/30891		
92242145009	**MW-25-130**	EPA 8260B Mod.	MSV/30891		
92242145010	**MW-25-190**	EPA 8260B Mod.	MSV/30891		
92242145011	**EB-031915**	EPA 8260B Mod.	MSV/30891		

Pace Analytical	Sample Condition Upon Receipt (SCUR)	Page 1 of 2
	Document Number: F-CHR-CS-003-rev.15	Issuing Authority: Pace Huntersville Quality Office

Client Name: WSP

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other_____

Thermometer Used: IR Gun T1401 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Temp Correction Factor T1401 No Correction

Corrected Cooler Temp.: 4.1 °C Biological Tissue is Frozen: Yes No (N/A)

Temp should be above freezing to 6°C

Comments:

Optional
Proj. Due Date:
Proj. Name:

Date and Initials of person examining contents: ME. 3/20/15

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☑No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix:_____			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes	☐No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A
Trip Blank Present:	☐Yes	☐No	☐N/A
Trip Blank Custody Seals Present	☐Yes	☑No	☐N/A
Pace Trip Blank Lot # (if purchased):_____			

10. #3 - one vial broke

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: JH Date: 3/20/15

SRF Review: JH Date: 3/20/15

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)

Place label here

WO# : 92242145

92242145

9224.2145

WSP CHAIN-OF-CUSTODY RECORD

Page 1 of 1

No 000168

Page 55 of 59

WSP Office Address: 11190 Sunrise Valley Dr, Reston VA, 20191

Project Name & Location: Kop-Flex, Hanover, MD

Project No.: 39196.25

WSP Contact Name: Eric.Johnston@WSPgroup.com

Sampler's Name: Rob Wallace, Matt Richardson

Sampler's Signature:

WSP Contact E-mail: Eric.Johnson@wspgroup.com

WSP Contact Phone: (703) 709-6500

Requested TAT: STD

Requested Deliverable: ☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD

Requested Analysis: VOCs (8260), 1,4-Dioxane (8260 SIM)

Preservative: HCl

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	HCl	ACl	Sample Comments
MW-28-45	G	3/17/15		1140		Aq	6	X	X	001
MW-28-210	↓	↓		1320		Aq	6	X	X	002
MS/MSD (of MW-28-210)	↓	↓		1321		Aq	6	X	X	1
MW-100	↓	↓		1200		Aq	6	X	X	003
MW-31-280	↓	↓		1554		Aq	6	X	X	004
MW-33-235	G	3/18/15		1100		Aq	6	X	X	005
MW-33-295	↓	↓		1325		Aq	6	X	X	006
MW-35-298	↓	↓		1700		Aq	6	X	X	007
MW-25-40	G	3/19/15		0900		Aq	6	X	X	008
MW-25-130	↓	↓		1515		Aq	6	X	X	009
MW-25-190	↓	↓		1515		Aq	6	X	X	010
EB-031915	↓	↓		1430		Aq	6	X	X	011
Trip Blank 1	—	Lab Provided		—		Aq	2	X		012 W/MW-31, 37, 35, 23, EB
Trip Blank 2	—	Lab Provided		—		Aq	2	X		013 W/MW-28-45, MW-28-210, MS/MSD, MW-100

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
	3/19/15	2000		3/20/15	0945	Pace Analytical	~~Huntersville, NC~~ ~~Greensburg, PA~~	Kevin Godwin
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Method of Shipment	Airbill No.	Shipping Date / No. of Coolers
						FedEx	807797781703	3/19/15 / 2

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	4.1	Y	N	N	

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk Bi = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

Enclosure B – Laboratory Reports for Residential Well Samples (January – March 2015)

New Jersey
ACCUTEST LABORATORIES

02/02/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

39196

Accutest Job Number: JB86794

Sampling Date: 01/19/15

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: **22**

NELAP ACCREDITED TNI LABORATORY

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: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

Table of Contents

Sample Summary

WSP

Job No: JB86794

090149-04, Kop-Flex, Hanover, MD
Project No: 39196

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB86794-1	01/19/15	13:25	ML	01/21/15	AQ	Ground Water	RW-7833CS-011915
JB86794-2	01/19/15	12:30	ML	01/21/15	AQ	Ground Water	RW-100CS-011915
JB86794-3	01/19/15	15:15	ML	01/21/15	AQ	Ground Water	RW-7814FN-011915
JB86794-4	01/19/15	16:37	ML	01/21/15	AQ	Ground Water	RW-737DNS-011915
JB86794-5	01/19/15	16:37	ML	01/21/15	AQ	Trip Blank Water	TRIP BLANKS

Summary of Hits

Job Number: JB86794
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 01/19/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB86794-1	**RW-7833CS-011915**					
Chloroform		0.11 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.5	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB86794-2	**RW-100CS-011915**					
Chloroform		0.12 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.4	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB86794-3	**RW-7814FN-011915**					
Chloroform		0.13 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
JB86794-4	**RW-737DNS-011915**					
Chloroform		0.18 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.43 J	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB86794-5	**TRIP BLANKS**					
Acetone		0.83 J	5.0	0.76	ug/l	EPA 524.2 REV 4.1
2-Butanone		0.73 J	5.0	0.32	ug/l	EPA 524.2 REV 4.1

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RW-7833CS-011915
Lab Sample ID: JB86794-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95372.D	1	01/22/15	MD	n/a	n/a	V1B4510
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.11	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	RW-7833CS-011915		
Lab Sample ID:	JB86794-1	**Date Sampled:**	01/19/15
Matrix:	AQ - Ground Water	**Date Received:**	01/21/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		78-114%
460-00-4	4-Bromofluorobenzene	100%		77-115%

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

Client Sample ID: RW-7833CS-011915
Lab Sample ID: JB86794-1
Matrix: AQ - Ground Water
Method: SW846 8260B BY SIM
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117556.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	73%		36-149%
460-00-4	4-Bromofluorobenzene	69%		34-135%

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

Client Sample ID: RW-100CS-011915
Lab Sample ID: JB86794-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95373.D	1	01/22/15	MD	n/a	n/a	V1B4510
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.12	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-100CS-011915
Lab Sample ID: JB86794-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.4	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	100%		77-115%

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

Client Sample ID: RW-100CS-011915
Lab Sample ID: JB86794-2
Matrix: AQ - Ground Water
Method: SW846 8260B BY SIM
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117557.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	79%		36-149%
460-00-4	4-Bromofluorobenzene	74%		34-135%

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

Client Sample ID:	RW-7814FN-011915		
Lab Sample ID:	JB86794-3	**Date Sampled:**	01/19/15
Matrix:	AQ - Ground Water	**Date Received:**	01/21/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95374.D	1	01/22/15	MD	n/a	n/a	V1B4510
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.13	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-7814FN-011915
Lab Sample ID: JB86794-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	97%		77-115%

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

Client Sample ID:	RW-7814FN-011915		
Lab Sample ID:	JB86794-3	**Date Sampled:**	01/19/15
Matrix:	AQ - Ground Water	**Date Received:**	01/21/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117558.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	68%		36-149%
460-00-4	4-Bromofluorobenzene	65%		34-135%

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

Client Sample ID: RW-737DNS-011915
Lab Sample ID: JB86794-4
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95375.D	1	01/22/15	MD	n/a	n/a	V1B4510
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.18	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-737DNS-011915
Lab Sample ID: JB86794-4
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.43	0.50	0.056	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	103%		78-114%
460-00-4	4-Bromofluorobenzene	100%		77-115%

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

Client Sample ID: RW-737DNS-011915
Lab Sample ID: JB86794-4
Matrix: AQ - Ground Water
Method: SW846 8260B BY SIM
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117559.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	74%		36-149%
460-00-4	4-Bromofluorobenzene	71%		34-135%

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

Client Sample ID: TRIP BLANKS
Lab Sample ID: JB86794-5
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95376.D	1	01/22/15	MD	n/a	n/a	V1B4510
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	0.83	5.0	0.76	ug/l	J
78-93-3	2-Butanone	0.73	5.0	0.32	ug/l	J
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: TRIP BLANKS
Lab Sample ID: JB86794-5
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/19/15
Date Received: 01/21/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	97%		77-115%

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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW

WSP CHAIN-OF-CUSTODY RECORD

Page 1 of 1

No 001176

WSP Office Address	11190 Sunrise Valley Drive Suite 300 Reston, VA 20191
Project Name & Location	Kop-Flex, Hanover, MD
Project No.	39196
WSP Contact Name	Eric Johnson
Sampler's Name	Molly Long
Sampler's Signature	Molly Long
WSP Contact E-mail	Eric.Johnson@wspgroup.com
WSP Contact Phone	(703) 709-6500
Requested TAT	Standard
Requested Deliverable	☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD
Preservative	JB86794

Requested Analysis: VOCs (524-2); 1,4-Dioxane (8260 B SIM)

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	HCl	HCl			Sample Comments
RW-7833CS-011915	Grab		1/19/15		1325	GW	6	X	X		1	V1058
RW-100CS-011915	Grab		1/19/15		1230	GW	6	X	X		2	
RW-7814FN-011915	Grab		1/19/15		1515	GW	6	X	X		3	
RW-737DNS-011915	Grab		1/19/15		1637	GW	6	X	X		4	
Trip Blanks	—		12/8/14		1100		4	X	X		5	

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
Molly Long	1/20/15	1630	Fedex			Accutest	Dayton, NJ	Tammy McCloskey 732-329-0200
Fedex	1/21/15	10:00				Method of Shipment: Fedex	Airbill No.: 8066 2671 9081	Shipping Date: 1/20/15 — No. of Coolers: 1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	4.1°C	Yes	NONE	Yes	Fedex # 8066 2671 9081

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk BI = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

2A/OL

LL

JB86794: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB86794 **Client:** **Project:**

Date / Time Received: 1/21/2015 10:00:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4.1/4); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB86794: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

02/05/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

39196

Accutest Job Number: JB87107

Sampling Date: 01/23/15

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: **22**

NELAP ACCREDITED TNI LABORATORY

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 Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

Table of Contents

-1-

Sample Summary

WSP

Job No: JB87107

090149-04, Kop-Flex, Hanover, MD
Project No: 39196

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB87107-1	01/23/15	10:30	ML	01/24/15	AQ	Ground Water	RW-7803FN-01232015
JB87107-2	01/23/15	11:26	ML	01/24/15	AQ	Ground Water	RW-7843CS-012315
JB87107-3	01/23/15	12:53	ML	01/24/15	AQ	Ground Water	RW-7831CS-012315
JB87107-4	01/23/15	13:20	ML	01/24/15	AQ	Ground Water	RW-7831CS-012315-F
JB87107-5	01/23/15	16:48	ML	01/24/15	AQ	Trip Blank Water	TRIP BLANKS

Summary of Hits

Job Number: JB87107
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 01/23/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB87107-1	**RW-7803FN-01232015**					
Methyl Tert Butyl Ether		2.0	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87107-2	**RW-7843CS-012315**					
No hits reported in this sample.						
JB87107-3	**RW-7831CS-012315**					
Chloroform		0.39 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.66	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87107-4	**RW-7831CS-012315-F**					
Chloroform		0.42 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.67	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87107-5	**TRIP BLANKS**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RW-7803FN-01232015
Lab Sample ID: JB87107-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95409.D	1	01/26/15	MD	n/a	n/a	V1B4512
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-7803FN-01232015
Lab Sample ID: JB87107-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.0	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	98%		77-115%

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

Client Sample ID:	RW-7803FN-01232015		
Lab Sample ID:	JB87107-1	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117560.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	76%		36-149%
460-00-4	4-Bromofluorobenzene	74%		34-135%

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

Client Sample ID: RW-7843CS-012315
Lab Sample ID: JB87107-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95410.D	1	01/26/15	MD	n/a	n/a	V1B4512
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	RW-7843CS-012315		
Lab Sample ID:	JB87107-2	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		78-114%
460-00-4	4-Bromofluorobenzene	98%		77-115%

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

Client Sample ID:	RW-7843CS-012315		
Lab Sample ID:	JB87107-2	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117561.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	76%		36-149%
460-00-4	4-Bromofluorobenzene	75%		34-135%

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

Client Sample ID: RW-7831CS-012315
Lab Sample ID: JB87107-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95411.D	1	01/26/15	MD	n/a	n/a	V1B4512
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.39	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-7831CS-012315
Lab Sample ID: JB87107-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.66	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	105%		78-114%
460-00-4	4-Bromofluorobenzene	99%		77-115%

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

Client Sample ID:	RW-7831CS-012315		
Lab Sample ID:	JB87107-3	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117562.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	78%		36-149%
460-00-4	4-Bromofluorobenzene	75%		34-135%

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

Client Sample ID:	RW-7831CS-012315-F		
Lab Sample ID:	JB87107-4	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95414.D	1	01/26/15	MD	n/a	n/a	V1B4512
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.42	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	RW-7831CS-012315-F		
Lab Sample ID:	JB87107-4	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.67	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		78-114%
460-00-4	4-Bromofluorobenzene	98%		77-115%

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

Client Sample ID:	RW-7831CS-012315-F		
Lab Sample ID:	JB87107-4	**Date Sampled:**	01/23/15
Matrix:	AQ - Ground Water	**Date Received:**	01/24/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117563.D	1	01/26/15	PS	n/a	n/a	V3C5333
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	76%		36-149%
460-00-4	4-Bromofluorobenzene	74%		34-135%

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

Client Sample ID: TRIP BLANKS
Lab Sample ID: JB87107-5
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/23/15
Date Received: 01/24/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95415.D	1	01/26/15	MD	n/a	n/a	V1B4512
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	TRIP BLANKS		
Lab Sample ID:	JB87107-5	**Date Sampled:**	01/23/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/24/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	104%		78-114%
460-00-4	4-Bromofluorobenzene	99%		77-115%

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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

3. LTB GW

JB87107

WSP CHAIN-OF-CUSTODY RECORD

Page 1 of 1

No 001177

WSP Office Address: 11190 Sunrise Valley Drive Ste. 300 Reston, VA 20191

Project Name & Location: Kop-Flex Hanover, MD

Project No.: 39196

WSP Contact Name: Eric Johnson

Sampler's Name: Molly Long, Taylor Burky

Sampler's Signature:

WSP Contact E-mail: Eric.Johnson@wspgroup.com

WSP Contact Phone: (703) 709-6500

Requested TAT: Standard

Requested Deliverable: ☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD

Requested Analysis: VOCs (524-2) with 1,4-Dioxane (8260B with SIM)

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	Preservative HCl	Preservative H4		Sample Comments
RW-7803FN-012320 15	Grab		1/23/15		1030	GW	6	X	X	1	
RW-7843CS-012315	Grab		1/23/15		1126	GW	6	X	X	2	
RW-7831CS-012315	Grab		1/23/15		1253	GW	6	X	X	3	
RW-7831CS-012315-F	Grab		1/23/15		1320	GW	6	X	X	4	
Trip Blanks	—		1/21/15		1645	-	4	X	X	5	VI106

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
Molly Long	1/23/15	1700	FedEx			Accutest	Dayton, NJ	Tammy McCloskey 732-329-0200
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Method of Shipment	Airbill No.	Shipping Date / No. of Coolers
				1-24-15	10:15	FedEx	8066 2671 9059	1/23/15 / 1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	1.4°C	✓	✓	✓	FX# 8066 2671 9059

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk BI = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

JK

3A Dan

TIC's 1.4°

JB87107: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB87107 **Client:** **Project:**

Date / Time Received: 1/24/2015 10:15:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (1.4/1.3); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB87107: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

02/10/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

Accutest Job Number: JB87302

Sampling Date: 01/29/15

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: **22**

NELAP ACCREDITED TNI LABORATORY

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: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

Table of Contents

-1-

Sample Summary

WSP

Job No: JB87302

090149-04, Kop-Flex, Hanover, MD

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB87302-1	01/29/15	12:38	TB	01/30/15	AQ	Ground Water	RW-1201KL-012915F
JB87302-2	01/29/15	12:45	TB	01/30/15	AQ	Ground Water	RW-1201KL-012915
JB87302-3	01/29/15	13:42	TB	01/30/15	AQ	Ground Water	RW-1204KL-012915F
JB87302-4	01/29/15	14:40	TB	01/30/15	AQ	Ground Water	RW-825REE-012915
JB87302-5	01/29/15	14:40	TB	01/30/15	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JB87302
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 01/29/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB87302-1	**RW-1201KL-012915F**					
Chloroform		0.15 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		3.7	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87302-2	**RW-1201KL-012915**					
Chloroform		0.15 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		4.2	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87302-3	**RW-1204KL-012915F**					
Chloroform		0.31 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.2	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87302-4	**RW-825REE-012915**					
Chloroform		0.21 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.27 J	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87302-5	**TRIP BLANK**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RW-1201KL-012915F
Lab Sample ID: JB87302-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95491.D	1	01/30/15	MD	n/a	n/a	V1B4516
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.15	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-1201KL-012915F
Lab Sample ID: JB87302-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.7	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	100%		77-115%

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

Client Sample ID:	RW-1201KL-012915F		
Lab Sample ID:	JB87302-1	**Date Sampled:**	01/29/15
Matrix:	AQ - Ground Water	**Date Received:**	01/30/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117678.D	1	01/30/15	PS	n/a	n/a	V3C5338
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	82%		36-149%
460-00-4	4-Bromofluorobenzene	83%		34-135%

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

Client Sample ID: RW-1201KL-012915
Lab Sample ID: JB87302-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95492.D	1	01/30/15	MD	n/a	n/a	V1B4516
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.15	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-1201KL-012915
Lab Sample ID: JB87302-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.2	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		78-114%
460-00-4	4-Bromofluorobenzene	99%		77-115%

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

Client Sample ID:	RW-1201KL-012915		
Lab Sample ID:	JB87302-2	**Date Sampled:**	01/29/15
Matrix:	AQ - Ground Water	**Date Received:**	01/30/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117679.D	1	01/30/15	PS	n/a	n/a	V3C5338
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	85%		36-149%
460-00-4	4-Bromofluorobenzene	85%		34-135%

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

Client Sample ID: RW-1204KL-012915F
Lab Sample ID: JB87302-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95493.D	1	01/30/15	MD	n/a	n/a	V1B4516
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.31	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-1204KL-012915F
Lab Sample ID: JB87302-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.2	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	97%		77-115%

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

Client Sample ID:	RW-1204KL-012915F		
Lab Sample ID:	JB87302-3	**Date Sampled:**	01/29/15
Matrix:	AQ - Ground Water	**Date Received:**	01/30/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117680.D	1	01/30/15	PS	n/a	n/a	V3C5338
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		36-149%
460-00-4	4-Bromofluorobenzene	87%		34-135%

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

Client Sample ID: RW-825REE-012915
Lab Sample ID: JB87302-4
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95494.D	1	01/30/15	MD	n/a	n/a	V1B4516
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.21	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-825REE-012915
Lab Sample ID: JB87302-4
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.27	0.50	0.056	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	103%		78-114%
460-00-4	4-Bromofluorobenzene	101%		77-115%

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

Client Sample ID:	RW-825REE-012915		
Lab Sample ID:	JB87302-4	**Date Sampled:**	01/29/15
Matrix:	AQ - Ground Water	**Date Received:**	01/30/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117681.D	1	01/30/15	PS	n/a	n/a	V3C5338
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	78%		36-149%
460-00-4	4-Bromofluorobenzene	80%		34-135%

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

Client Sample ID: TRIP BLANK
Lab Sample ID: JB87302-5
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95495.D	1	01/30/15	MD	n/a	n/a	V1B4516
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: TRIP BLANK
Lab Sample ID: JB87302-5
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 01/29/15
Date Received: 01/30/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	102%		78-114%
460-00-4	4-Bromofluorobenzene	101%		77-115%

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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
LWTB

WSP CHAIN-OF-CUSTODY RECORD

WSP

WSP Office Address: 11190 Sunrise Valley Drive Ste. 300 Reston, VA 20191

Page of

No 000185

Project Name & Location	Project No.	WSP Contact Name
Kop Flex Hanover MD	391196	Eric Johnson

Requested TAT: Standard

Sampler's Name	Sampler's Signature	WSP Contact E-mail	WSP Contact Phone
Molly Long, Taylor Burley	Molly Long, Taylor Burley	Eric.Johnson@wspgroup.com	(703) 709-6500

Requested Deliverable: LEVEL II ☐ ERIMS EDD; LEVEL III ☒ GISKEY EDD; LEVEL IV ☐ EQUIS EDD

Requested Analysis: VOCs (524-2); 1,4-Dioxane (8260B SIM)

Preservative: JB87302

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	HCl	#Cl							Sample Comments
RW-1201KL-012915F	G		1/29/15		1238	GW	6	X	X		1					
RW-1201KL-012915	G		1/29/15		1245	GW	6	X	X		2					V1128
RW-1204KL-012915F	G		1/29/15		1342	GW	6	X	X		3					
RW-825REE-012915	G		1/29/15		1440	GW	6	X	X		4					
Trip Blank			1/21/15		1648		4	X	X		5					

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
Molly Long	1/29/15	1720	FedEx			Accutest	Dayton, NJ	Tammy McCloskey 732-329-0200
FedEx	1/30/15	10:00						

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Method of Shipment	Airbill No.	Shipping Date	No. of Coolers
						FedEx	8066 8862 7041	1/29/15	1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	4.2 °C Ip	Yes	NONE	Yes	fed ex # 8066 8862 7041

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk BI = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

2A Ice

JL

4.1
4

JB87302: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB87302 **Client:** **Project:**

Date / Time Received: 1/30/2015 10:00:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4.2/4.1); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB87302: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

02/16/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

39196

Accutest Job Number: JB87737

Sampling Date: 02/05/15

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: **13**

NELAP ACCREDITED TNI LABORATORY

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: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

Table of Contents

Sample Summary

WSP

Job No: JB87737

090149-04, Kop-Flex, Hanover, MD
Project No: 39196

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB87737-1	02/05/15	11:50	ML	02/06/15	AQ	Ground Water	RW-7859CS-020515
JB87737-2	02/05/15	11:50	ML	02/06/15	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JB87737
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 02/05/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB87737-1	**RW-7859CS-020515**					
Chloroform		0.47 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.1	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB87737-2	**TRIP BLANK**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-7859CS-020515		
Lab Sample ID:	JB87737-1	**Date Sampled:**	02/05/15
Matrix:	AQ - Ground Water	**Date Received:**	02/06/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95616.D	1	02/09/15	MD	n/a	n/a	V1B4524
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.47	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	RW-7859CS-020515		
Lab Sample ID:	JB87737-1	**Date Sampled:**	02/05/15
Matrix:	AQ - Ground Water	**Date Received:**	02/06/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.1	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	100%		77-115%

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

Client Sample ID:	RW-7859CS-020515		
Lab Sample ID:	JB87737-1	**Date Sampled:**	02/05/15
Matrix:	AQ - Ground Water	**Date Received:**	02/06/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S192026.D	1	02/09/15	VC	n/a	n/a	VS7870
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	70%		36-149%
460-00-4	4-Bromofluorobenzene	76%		34-135%

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

Client Sample ID: TRIP BLANK
Lab Sample ID: JB87737-2
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/05/15
Date Received: 02/06/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95617.D	1	02/09/15	MD	n/a	n/a	V1B4524
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: TRIP BLANK
Lab Sample ID: JB87737-2
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/05/15
Date Received: 02/06/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	100%		77-115%

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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
WB

JB87737

WSP CHAIN-OF-CUSTODY RECORD

Page 1 of 1

No 000507

WSP Office Address: 11190 Sunrise Valley Dr. Suite 300 Reston, VA 20191

Project Name & Location: Kopflex Hanover MD

Project No.: 39196

WSP Contact Name: Eric Johnson

Sampler's Name: Molly Long, Taylor Banks

Sampler's Signature:

WSP Contact E-mail: Eric.Johnson@wspgroup.com

WSP Contact Phone: (703) 709-6500

Requested Analysis: VOCs (524-2), 1,4-Dioxane (8260B SIM)

Requested TAT: Standard

Requested Deliverable: ☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	Preservative HCl	Preservative HCl	Sample Comments
RW-7859CS-020515	Grab		2/5/15		1150	GW	6	X	X	1
Trip Blank	—		1/21/15		1648		4	X	X	2

VII76

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
Molly Long	2/5/15	1720	FedEx			Accutest	Dayton, NJ	Tamy McCloskey 732-329-0200
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Method of Shipment	Airbill No.	Shipping Date / No. of Coolers
Fedex	2/6/15	10:15				FedEx	8006 8862 7041	2/5/15 / 1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	1.9 / 1.8	(Y)	(Y)	(Y)	fedex # 8006 2671 9072

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk Bi = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

2 Bottles

1L

JB87737: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB87737 **Client:** **Project:**

Date / Time Received: 2/6/2015 10:15:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (1.9/1.6); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB87737: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

02/20/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

39196

Accutest Job Number: JB88131

Sampling Dates: 02/10/15 - 02/11/15

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: **25**

NELAP ACCREDITED TNI LABORATORY

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: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

Sections: 1 2 3 4

Table of Contents

Accutest Laboratories

Sample Summary

WSP

Job No: JB88131

090149-04, Kop-Flex, Hanover, MD
Project No: 39196

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB88131-1	02/10/15	11:17	RW	02/12/15	AQ	Ground Water	RW-7847CS-021015
JB88131-2	02/10/15	12:20	RW	02/12/15	AQ	Ground Water	RW-734DNS-021015F
JB88131-3	02/10/15	12:31	RW	02/12/15	AQ	Ground Water	RW-734DNS-021015
JB88131-4	02/11/15	14:41	RW	02/12/15	AQ	Trip Blank Water	TRIP BLANK
JB88131-5	02/11/15	13:52	RW	02/12/15	AQ	Ground Water	RW-854REE-021115
JB88131-6	02/11/15	14:41	RW	02/12/15	AQ	Ground Water	RW-7845CS-021115

Summary of Hits

Job Number: JB88131
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 02/10/15 thru 02/11/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB88131-1	**RW-7847CS-021015**					
Chloroform		0.13 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.7	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB88131-2	**RW-734DNS-021015F**					
Chloroform		0.62	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.84	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB88131-3	**RW-734DNS-021015**					
Chloroform		0.62	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.84	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB88131-4	**TRIP BLANK**					
Acetone		1.1 J	5.0	0.76	ug/l	EPA 524.2 REV 4.1
Methylene chloride		0.50	0.50	0.051	ug/l	EPA 524.2 REV 4.1
JB88131-5	**RW-854REE-021115**					
Chloroform		0.22 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
1,2-Dichloroethane		0.77	0.50	0.030	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.7	0.50	0.056	ug/l	EPA 524.2 REV 4.1
JB88131-6	**RW-7845CS-021115**					
Chloroform		0.19 J	0.50	0.066	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		1.0	0.50	0.056	ug/l	EPA 524.2 REV 4.1

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RW-7847CS-021015
Lab Sample ID: JB88131-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95696.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.13	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-7847CS-021015
Lab Sample ID: JB88131-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.7	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	99%		77-115%

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

Client Sample ID: RW-7847CS-021015
Lab Sample ID: JB88131-1
Matrix: AQ - Ground Water
Method: SW846 8260B BY SIM
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117984.D	1	02/13/15	PS	n/a	n/a	V3C5354
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		36-149%
460-00-4	4-Bromofluorobenzene	102%		34-135%

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

Client Sample ID: RW-734DNS-021015F
Lab Sample ID: JB88131-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95697.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.62	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-734DNS-021015F
Lab Sample ID: JB88131-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.84	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	101%		78-114%
460-00-4	4-Bromofluorobenzene	100%		77-115%

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

Client Sample ID:	RW-734DNS-021015F		
Lab Sample ID:	JB88131-2	**Date Sampled:**	02/10/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117985.D	1	02/13/15	PS	n/a	n/a	V3C5354
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	90%		36-149%
460-00-4	4-Bromofluorobenzene	95%		34-135%

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

Client Sample ID:	RW-734DNS-021015		
Lab Sample ID:	JB88131-3	**Date Sampled:**	02/10/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95698.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.62	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-734DNS-021015
Lab Sample ID: JB88131-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/10/15
Date Received: 02/12/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.84	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	99%		77-115%

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

Client Sample ID:	RW-734DNS-021015		
Lab Sample ID:	JB88131-3	**Date Sampled:**	02/10/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117986.D	1	02/13/15	PS	n/a	n/a	V3C5354
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		36-149%
460-00-4	4-Bromofluorobenzene	98%		34-135%

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

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB88131-4	**Date Sampled:**	02/11/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/12/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95699.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	1.1	5.0	0.76	ug/l	J
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	ND	0.50	0.066	ug/l	
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB88131-4	**Date Sampled:**	02/11/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/12/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	0.50	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	99%		77-115%

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

Client Sample ID: RW-854REE-021115
Lab Sample ID: JB88131-5
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/11/15
Date Received: 02/12/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95700.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.22	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	0.77	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID: RW-854REE-021115
Lab Sample ID: JB88131-5
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 02/11/15
Date Received: 02/12/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.7	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	100%		77-115%

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

Client Sample ID:	RW-854REE-021115		
Lab Sample ID:	JB88131-5	**Date Sampled:**	02/11/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117987.D	1	02/13/15	PS	n/a	n/a	V3C5354
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		36-149%
460-00-4	4-Bromofluorobenzene	102%		34-135%

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

Client Sample ID:	RW-7845CS-021115		
Lab Sample ID:	JB88131-6	**Date Sampled:**	02/11/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B95701.D	1	02/13/15	MD	n/a	n/a	V1B4528
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	0.76	ug/l	
78-93-3	2-Butanone	ND	5.0	0.32	ug/l	
71-43-2	Benzene	ND	0.50	0.028	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.062	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.054	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.034	ug/l	
75-25-2	Bromoform	ND	0.50	0.038	ug/l	
74-83-9	Bromomethane	ND	0.50	0.099	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.028	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.17	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.021	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.051	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.023	ug/l	
75-00-3	Chloroethane	ND	0.50	0.070	ug/l	
67-66-3	Chloroform	0.19	0.50	0.066	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.078	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.040	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.028	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.092	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.026	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.083	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.061	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.12	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.048	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.030	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.050	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.064	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.064	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.036	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.044	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.047	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.060	ug/l	

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

Client Sample ID:	RW-7845CS-021115		
Lab Sample ID:	JB88131-6	**Date Sampled:**	02/11/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.045	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.021	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.021	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.067	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.026	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.022	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.024	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.049	ug/l	
110-54-3	Hexane	ND	0.50	0.038	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.12	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.051	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.093	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.051	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	0.50	0.056	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.18	ug/l	
91-20-3	Naphthalene	ND	0.50	0.050	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.075	ug/l	
100-42-5	Styrene	ND	0.50	0.033	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.053	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.027	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.038	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.059	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.059	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.066	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.045	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.081	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.075	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.047	ug/l	
108-88-3	Toluene	ND	0.50	0.071	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.030	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.080	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.043	ug/l	
	m,p-Xylene	ND	0.50	0.11	ug/l	
95-47-6	o-Xylene	ND	0.50	0.046	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.046	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	98%		77-115%

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

Client Sample ID:	RW-7845CS-021115		
Lab Sample ID:	JB88131-6	**Date Sampled:**	02/11/15
Matrix:	AQ - Ground Water	**Date Received:**	02/12/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C117988.D	1	02/13/15	PS	n/a	n/a	V3C5354
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		36-149%
460-00-4	4-Bromofluorobenzene	101%		34-135%

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

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW

WSP CHAIN-OF-CUSTODY RECORD

WSP Office Address: 11190 Sunrise Valley Drive, Suite 309 Reston, VA 20191

Page 1 of 1

No 000508

Project Name & Location	Project No.	WSP Contact Name
KapFlex, Hanover, MD	39196	Eric Johnson

Requested TAT: Standard

Sampler's Name	Sampler's Signature	WSP Contact E-mail	WSP Contact Phone
Molly Long Rob Wallace		Eric.Johnson@wspgroup.com	(703) 709-6500

Requested Deliverable: ☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD

Requested Analysis: VOCs (524-2); 1,4-Dioxane (8260B Low SIM)

Preservative: HCl; HU

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	HCl	HU		Sample Comments
RW-7847CS-021015	G		2/10/15		1117	GW	6	X	X	1	JB88131
RW-734DNS-021015F	G		2/10/15		1220	GW	6	X	X	2	
RW-734DNS-021015	G		2/10/15		1231	GW	6	X	X	3	
Trip Blank			2/10/15		0936		4	X	X	4	
RW-854REE-021115	G		2/11/15		1352	GW	6	X	X	5	
RW-7845CS-021115	G		2/11/15		1441	GW	6	X	X	6	

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
Molly Long	2/11/15	1800	Fedex			Accutest	Dayton, NJ	Tammy McCloskey 732-329-0200
Fedex	2/12/15	09:30				Method of Shipment: FedEx	Airbill No.: 806626719107	Shipping Date: 2/11/15; No. of Coolers: 1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk BI = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

Rec Fedex Relinquish Fedex 2/12/15 9:30 Fedex # 8066 2671 9107 Seal # n/a 3.0C

JB88131: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB88131 **Client:** **Project:**

Date / Time Received: 2/12/2015 9:50:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (3/2.7); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB88131: Chain of Custody
Page 2 of 2

New Jersey
ACCUTEST LABORATORIES

04/02/15

Technical Report for

WSP

090149-04, Kop-Flex, Hanover, MD

39196

Accutest Job Number: JB90471

Sampling Date: 03/19/15

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: **19**

NELAP ACCREDITED TNI LABORATORY

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: Mayur Patel 732-329-0200

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

Sections: 1 2 3 4

Table of Contents

-1-

Sample Summary

WSP

Job No: JB90471

090149-04, Kop-Flex, Hanover, MD
Project No: 39196

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JB90471-1	03/19/15	10:20	RW/MR	03/20/15	AQ	Ground Water	RW-7932AND-031915
JB90471-2	03/19/15	11:30	RW/MR	03/20/15	AQ	Ground Water	RW-7740TO-031915
JB90471-3	03/19/15	18:25	RW/MR	03/20/15	AQ	Ground Water	RW-7550DA-031915
JB90471-4	03/19/15	18:25	RW/MR	03/20/15	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JB90471
Account: WSP
Project: 090149-04, Kop-Flex, Hanover, MD
Collected: 03/19/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB90471-1	**RW-7932AND-031915**					
1,1-Dichloroethane		0.13 J	0.50	0.039	ug/l	EPA 524.2 REV 4.1
1,1-Dichloroethylene		4.1	0.50	0.054	ug/l	EPA 524.2 REV 4.1
1,1,1-Trichloroethane		0.43 J	0.50	0.050	ug/l	EPA 524.2 REV 4.1
JB90471-2	**RW-7740TO-031915**					
1,1-Dichloroethylene		1.8	0.50	0.054	ug/l	EPA 524.2 REV 4.1
1,1,1-Trichloroethane		0.28 J	0.50	0.050	ug/l	EPA 524.2 REV 4.1
JB90471-3	**RW-7550DA-031915**					
Chloroform		0.14 J	0.50	0.031	ug/l	EPA 524.2 REV 4.1
Methyl Tert Butyl Ether		0.96	0.50	0.030	ug/l	EPA 524.2 REV 4.1
JB90471-4	**TRIP BLANK**					
Acetone		1.2 J	5.0	0.91	ug/l	EPA 524.2 REV 4.1
Methylene chloride		0.36 J	0.50	0.047	ug/l	EPA 524.2 REV 4.1

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RW-7932AND-031915
Lab Sample ID: JB90471-1
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B96175.D	1	03/23/15	MD	n/a	n/a	V1B4551
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	0.91	ug/l	
78-93-3	2-Butanone	ND	5.0	0.57	ug/l	
71-43-2	Benzene	ND	0.50	0.057	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.035	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.088	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.082	ug/l	
75-25-2	Bromoform	ND	0.50	0.046	ug/l	
74-83-9	Bromomethane	ND	0.50	0.077	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.030	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.074	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.045	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.028	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.027	ug/l	
75-00-3	Chloroethane	ND	0.50	0.037	ug/l	
67-66-3	Chloroform	ND	0.50	0.031	ug/l	
74-87-3	Chloromethane	ND	0.50	0.044	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.045	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.073	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.074	ug/l	
75-34-3	1,1-Dichloroethane	0.13	0.50	0.039	ug/l	J
75-35-4	1,1-Dichloroethylene	4.1	0.50	0.054	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.053	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.078	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.031	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.034	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.082	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.041	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.067	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.042	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.046	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.054	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.046	ug/l	

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

Client Sample ID:	RW-7932AND-031915		
Lab Sample ID:	JB90471-1	**Date Sampled:**	03/19/15
Matrix:	AQ - Ground Water	**Date Received:**	03/20/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.052	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.034	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.039	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.081	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.033	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.063	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.033	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.073	ug/l	
110-54-3	Hexane	ND	0.50	0.094	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.084	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.062	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.047	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.030	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	0.50	0.084	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.061	ug/l	
100-42-5	Styrene	ND	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.028	ug/l	
71-55-6	1,1,1-Trichloroethane	0.43	0.50	0.050	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.035	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.052	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.024	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.047	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.035	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.031	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.041	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.091	ug/l	
108-88-3	Toluene	ND	0.50	0.044	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.024	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.057	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.032	ug/l	
	m,p-Xylene	ND	0.50	0.13	ug/l	
95-47-6	o-Xylene	ND	0.50	0.029	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	95%		78-114%
460-00-4	4-Bromofluorobenzene	102%		77-115%

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

Client Sample ID:	RW-7932AND-031915		
Lab Sample ID:	JB90471-1	**Date Sampled:**	03/19/15
Matrix:	AQ - Ground Water	**Date Received:**	03/20/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C118726.D	1	03/24/15	PS	n/a	n/a	V3C5399
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	90%		36-149%
460-00-4	4-Bromofluorobenzene	94%		34-135%

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

Client Sample ID: RW-7740TO-031915
Lab Sample ID: JB90471-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B96176.D	1	03/23/15	MD	n/a	n/a	V1B4551
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	0.91	ug/l	
78-93-3	2-Butanone	ND	5.0	0.57	ug/l	
71-43-2	Benzene	ND	0.50	0.057	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.035	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.088	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.082	ug/l	
75-25-2	Bromoform	ND	0.50	0.046	ug/l	
74-83-9	Bromomethane	ND	0.50	0.077	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.030	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.074	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.045	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.028	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.027	ug/l	
75-00-3	Chloroethane	ND	0.50	0.037	ug/l	
67-66-3	Chloroform	ND	0.50	0.031	ug/l	
74-87-3	Chloromethane	ND	0.50	0.044	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.045	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.073	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.074	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.039	ug/l	
75-35-4	1,1-Dichloroethylene	1.8	0.50	0.054	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.053	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.078	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.031	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.034	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.082	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.041	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.067	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.042	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.046	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.054	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.046	ug/l	

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

Client Sample ID: RW-7740TO-031915
Lab Sample ID: JB90471-2
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.052	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.034	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.039	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.081	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.033	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.063	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.033	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.073	ug/l	
110-54-3	Hexane	ND	0.50	0.094	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.084	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.062	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.047	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.030	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	0.50	0.084	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.061	ug/l	
100-42-5	Styrene	ND	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.028	ug/l	
71-55-6	1,1,1-Trichloroethane	0.28	0.50	0.050	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.035	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.052	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.024	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.047	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.035	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.031	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.041	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.091	ug/l	
108-88-3	Toluene	ND	0.50	0.044	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.024	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.057	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.032	ug/l	
	m,p-Xylene	ND	0.50	0.13	ug/l	
95-47-6	o-Xylene	ND	0.50	0.029	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	95%		78-114%
460-00-4	4-Bromofluorobenzene	102%		77-115%

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

Client Sample ID:	RW-7740TO-031915		
Lab Sample ID:	JB90471-2	**Date Sampled:**	03/19/15
Matrix:	AQ - Ground Water	**Date Received:**	03/20/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C118727.D	1	03/24/15	PS	n/a	n/a	V3C5399
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	87%		36-149%
460-00-4	4-Bromofluorobenzene	92%		34-135%

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

Client Sample ID: RW-7550DA-031915
Lab Sample ID: JB90471-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B96177.D	1	03/23/15	MD	n/a	n/a	V1B4551
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	0.91	ug/l	
78-93-3	2-Butanone	ND	5.0	0.57	ug/l	
71-43-2	Benzene	ND	0.50	0.057	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.035	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.088	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.082	ug/l	
75-25-2	Bromoform	ND	0.50	0.046	ug/l	
74-83-9	Bromomethane	ND	0.50	0.077	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.030	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.074	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.045	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.028	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.027	ug/l	
75-00-3	Chloroethane	ND	0.50	0.037	ug/l	
67-66-3	Chloroform	0.14	0.50	0.031	ug/l	J
74-87-3	Chloromethane	ND	0.50	0.044	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.045	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.073	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.074	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.039	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.054	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.053	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.078	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.031	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.034	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.082	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.041	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.067	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.042	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.046	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.054	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.046	ug/l	

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

Client Sample ID: RW-7550DA-031915
Lab Sample ID: JB90471-3
Matrix: AQ - Ground Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.052	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.034	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.039	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.081	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.033	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.063	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.033	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.073	ug/l	
110-54-3	Hexane	ND	0.50	0.094	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.084	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.062	ug/l	
75-09-2	Methylene chloride	ND	0.50	0.047	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.96	0.50	0.030	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	0.50	0.084	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.061	ug/l	
100-42-5	Styrene	ND	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.028	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.050	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.035	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.052	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.024	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.047	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.035	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.031	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.041	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.091	ug/l	
108-88-3	Toluene	ND	0.50	0.044	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.024	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.057	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.032	ug/l	
	m,p-Xylene	ND	0.50	0.13	ug/l	
95-47-6	o-Xylene	ND	0.50	0.029	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	95%		78-114%
460-00-4	4-Bromofluorobenzene	102%		77-115%

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

Client Sample ID:	RW-7550DA-031915		
Lab Sample ID:	JB90471-3	**Date Sampled:**	03/19/15
Matrix:	AQ - Ground Water	**Date Received:**	03/20/15
Method:	SW846 8260B BY SIM	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C118728.D	1	03/24/15	PS	n/a	n/a	V3C5399
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	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	82%		36-149%
460-00-4	4-Bromofluorobenzene	87%		34-135%

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

Client Sample ID: TRIP BLANK
Lab Sample ID: JB90471-4
Matrix: AQ - Trip Blank Water
Method: EPA 524.2 REV 4.1
Project: 090149-04, Kop-Flex, Hanover, MD

Date Sampled: 03/19/15
Date Received: 03/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1B96178.D	1	03/23/15	MD	n/a	n/a	V1B4551
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	1.2	5.0	0.91	ug/l	J
78-93-3	2-Butanone	ND	5.0	0.57	ug/l	
71-43-2	Benzene	ND	0.50	0.057	ug/l	
108-86-1	Bromobenzene	ND	0.50	0.035	ug/l	
74-97-5	Bromochloromethane	ND	0.50	0.088	ug/l	
75-27-4	Bromodichloromethane	ND	0.50	0.082	ug/l	
75-25-2	Bromoform	ND	0.50	0.046	ug/l	
74-83-9	Bromomethane	ND	0.50	0.077	ug/l	
104-51-8	n-Butylbenzene	ND	0.50	0.030	ug/l	
135-98-8	sec-Butylbenzene	ND	0.50	0.074	ug/l	
98-06-6	tert-Butylbenzene	ND	0.50	0.045	ug/l	
75-15-0	Carbon disulfide	ND	0.50	0.028	ug/l	
108-90-7	Chlorobenzene	ND	0.50	0.027	ug/l	
75-00-3	Chloroethane	ND	0.50	0.037	ug/l	
67-66-3	Chloroform	ND	0.50	0.031	ug/l	
74-87-3	Chloromethane	ND	0.50	0.044	ug/l	
95-49-8	o-Chlorotoluene	ND	0.50	0.045	ug/l	
106-43-4	p-Chlorotoluene	ND	0.50	0.073	ug/l	
56-23-5	Carbon tetrachloride	ND	0.50	0.074	ug/l	
75-34-3	1,1-Dichloroethane	ND	0.50	0.039	ug/l	
75-35-4	1,1-Dichloroethylene	ND	0.50	0.054	ug/l	
563-58-6	1,1-Dichloropropene	ND	0.50	0.053	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.078	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.50	0.031	ug/l	
107-06-2	1,2-Dichloroethane	ND	0.50	0.034	ug/l	
78-87-5	1,2-Dichloropropane	ND	0.50	0.082	ug/l	
142-28-9	1,3-Dichloropropane	ND	0.50	0.041	ug/l	
594-20-7	2,2-Dichloropropane	ND	0.50	0.067	ug/l	
124-48-1	Dibromochloromethane	ND	0.50	0.042	ug/l	
74-95-3	Dibromomethane	ND	0.50	0.046	ug/l	
75-71-8	Dichlorodifluoromethane	ND	0.50	0.054	ug/l	
541-73-1	m-Dichlorobenzene	ND	0.50	0.046	ug/l	

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

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JB90471-4	**Date Sampled:**	03/19/15
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/20/15
Method:	EPA 524.2 REV 4.1	**Percent Solids:**	n/a
Project:	090149-04, Kop-Flex, Hanover, MD		

VOA List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	0.50	0.052	ug/l	
106-46-7	p-Dichlorobenzene	ND	0.50	0.034	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.50	0.039	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.50	0.081	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.033	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.063	ug/l	
100-41-4	Ethylbenzene	ND	0.50	0.033	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.50	0.073	ug/l	
110-54-3	Hexane	ND	0.50	0.094	ug/l	
591-78-6	2-Hexanone	ND	2.0	0.084	ug/l	
98-82-8	Isopropylbenzene	ND	0.50	0.054	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.50	0.062	ug/l	
75-09-2	Methylene chloride	0.36	0.50	0.047	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.030	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2.0	0.27	ug/l	
91-20-3	Naphthalene	ND	0.50	0.084	ug/l	
103-65-1	n-Propylbenzene	ND	0.50	0.061	ug/l	
100-42-5	Styrene	ND	0.50	0.028	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.50	0.028	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	0.50	0.050	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.035	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	0.50	0.052	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.50	0.024	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	0.50	0.047	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	0.035	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	0.031	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	0.041	ug/l	
127-18-4	Tetrachloroethylene	ND	0.50	0.091	ug/l	
108-88-3	Toluene	ND	0.50	0.044	ug/l	
79-01-6	Trichloroethylene	ND	0.50	0.024	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.057	ug/l	
75-01-4	Vinyl chloride	ND	0.50	0.032	ug/l	
	m,p-Xylene	ND	0.50	0.13	ug/l	
95-47-6	o-Xylene	ND	0.50	0.029	ug/l	
1330-20-7	Xylenes (total)	ND	0.50	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2199-69-1	1,2-Dichlorobenzene-d4	94%		78-114%
460-00-4	4-Bromofluorobenzene	100%		77-115%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

JB90471

WSP CHAIN-OF-CUSTODY RECORD

Page 1 of 1

No 000169

WSP Office Address: 11190 Sunrise Valley Dr. Reston, VA 20191

Project Name & Location: Kop-Flex, Hanover, MD

Project No.: 39196

WSP Contact Name: Eric Johnson

Sampler's Name: Rob Wallace, Matt Richardson

Sampler's Signature:

WSP Contact E-mail: Eric.Johnson@wspgroup.com

WSP Contact Phone: (703) 709-6500

Requested TAT: STD

Requested Deliverable: ☐ LEVEL II ☐ ERIMS EDD ☒ LEVEL III ☐ GISKEY EDD ☐ LEVEL IV ☐ EQUIS EDD

Requested Analysis: VOCs (524.4), 1,4-Dioxane (8260C)

Sample ID	Comp/ Grab	Collection Date Start*	Collection Date Stop	Collection Time Start*	Collection Time Stop	Matrix	No. of Containers	Preservative HCl	Preservative	Sample Comments
-1 RW-7932AND-031915	G	3/19/15		1020		Aq	6	X	X	
-2 RW-7740TO-031915	G	3/19/15		1130		Aq	6	X	X	V415
-3 RW-7550DA-031915	G	3/19/15		1825		Aq	6	X	X	
-4 Trip Blank	G	3/19/15		1900		Aq	2	X		

INITIAL ASESSMENT JB/ac

LABEL VERIFICATION

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Laboratory Name	Laboratory Location	Laboratory Contact
	3/19/15	2000				Accutest	Dayton, NJ	Tammy McCloskey
Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time	Method of Shipment	Airbill No.	Shipping Date / No. of Coolers
	3/20/15	09:40				Fedex	6250 6356636	3/19/15 / 1

Sample Condition (Laboratory Use Only)	Temp in °C	Received on Ice	Sealed Cooler	Sample Intact	Additional Comments
	2.2 °C IR	Y (E)	Y ES	Y (E)	Fedex # 6250 6350 6636, NO SEAL #

*Use start and stop time/date for composite and air samples. Include single start time and date for all other samples.

Matrix: GW = Groundwater S = Soil SE = Sediment SW = Surface Water WW = Wastewater A = Air W = Wipe B = Bulk Bi = Biota O = Other (detail in comments)

Preservation: I = Ice H = HCl N = HNO_3 S = H_2SO_4 NO = NaOH O = Other (detail in comments)

JB90471: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB90471 **Client:** **Project:**

Date / Time Received: 3/20/2015 9:40:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (2.2/0.4); 0

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JB90471: Chain of Custody
Page 2 of 2