Georgia Environmental Protection Division
Land Protection Branch
Response and Remediation Program
Response Development Units 1 – 3

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Name of Document:	Post VRP CSR Monitoring Report
Date of Document:	January 31, 2018
Site Name:	Thermo King Corporation – Louisville, Georgia
Site ID Number:	HSI 10702/Parcel 0090-024

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I certify that the information I am submitting is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: 

Name (printed): Rhonda N. Quinn

Date: 1/31/2017

Organization: Amec Foster Wheeler

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Receipt Date
(for EPD use only)

POST-VRP CSR MONITORING REPORT

Thermo King Corporation
Louisville, Jefferson County, Georgia
HSI Site No. 10702

Prepared for:	Thermo King Corporation 1430 Georgia Highway 24 East, Louisville, Georgia 30434
Date:	January 31, 2018
Prepared by:	Amec Foster Wheeler Environment & Infrastructure, Inc. 1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144
Project No.:	6122-09-0322

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1.0 PROFESSIONAL GROUNDWATER SCIENTIST CERTIFICATION

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground-water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.

1-31-18

Rhonda N. Quinn, P.G.
Registered Professional Geologist
Georgia Registration P.G. #1031

Date

2.0 INTRODUCTION AND BACKGROUND

This Post-Voluntary Remediation Program-Compliance Status Report (Post-VRP CSR) Monitoring Report, is the second report in the post-VRP CSR monitoring period. The first report in the post-VRP CSR monitoring period was submitted on December 16, 2016. Ten VRP Status Reports (documenting 5 years of monitoring from March 2011 through December 2015) were submitted to the Georgia Environmental Protection Division (EPD) in accordance with the Voluntary Remediation Program (VRP) for the Thermo King Corporation site, Hazardous Site Inventory (HSI) No. 10702/Tax Parcel 0090-024. This Monitoring Report covers the activities conducted from January through December 2017 and documents the monitoring and inspections described in the March 10, 2016 VRP CSR. These activities included annual seep and surface water monitoring conducted in November 2017, and the annual inspections of the rip-rap blanket and building floor slab.

The Thermo King Site is located at 1430 Highway 24 East in Louisville, Jefferson County, Georgia. The site soil and groundwater impacts were delineated under the Georgia Hazardous Site Response Act (HSRA) and certified to risk reduction standards. HSRA Compliance Status Reports were prepared and submitted December 17, 2003 and March 21, 2007. EPD approved the Compliance Status Report and requested a Corrective Action Plan (CAP). An initial VRP Application, dated January 29, 2010 and an Addendum, dated December 22, 2010, were submitted to EPD to enter the site into the VRP. The VRP Application was submitted in lieu of a HSRA CAP. The VRP Application Addendum contained a revised Voluntary Investigation and Remediation Plan (VIRP) and addressed EPD comment letters dated May 17, August 31, and October 15, 2010. On March 10, 2011, EPD approved the VIRP and accepted the Thermo King site into the VRP. Ten Status Reports were submitted to EPD covering the time period from March 2011 to December 2015. A VRP CSR was prepared and submitted to EPD on March 10, 2016 and EPD's approval and/or comments on the CSR are pending. The VRP CSR presented data along with a fate-and-transport groundwater model to demonstrate:

- The engineering (building floor slab and rip-rap blanket) and institutional (Environmental Covenant) controls are effective in limiting exposure to VOCs in soils, groundwater and precluding the surface expression of seep waters containing constituents at concentrations above Instream Water Quality Criteria (ISWQC).
- Constituents in the Uppermost Water-Bearing Zone have not and will not impact Manson Branch at concentrations exceeding their respective ISWQC.
- Contaminant migration in the Intermediate Water-Bearing Zone will stabilize and recede before constituent concentrations exceed maximum contaminants levels (MCLs) at the property line.
- Based on the five years of monitoring and results of groundwater modeling, Thermo King requested that groundwater monitoring be discontinued and annual seep and surface water monitoring be conducted along with inspections and maintenance of the engineering controls as appropriate continuing actions to protect human health and the environment.

EPD conducted a site visit on March 29, 2016 to review the engineering controls and site conditions as part of the VRP process.

EPD provided comment on the CSR in their November 30, 2017 letter. Thermo King's responses to these EPD comments are due January 31, 2018.

3.0 WORK PERFORMED JANUARY TO DECEMBER 2017

The post-CSR activities currently identified to be performed at the Thermo King site are described in the VRP CSR, dated March 10, 2016. Activities conducted in 2017 include post-CSR annual seep and surface water sampling and analysis, annual inspections of the engineering controls, and annual update of the financial assurance. These activities are described in the following sections.

3.1 Post-VRP CSR Annual Seep and Surface Water Sampling and Analysis

Per the VRP Remediation Plan (December 2010) groundwater was monitored for five years (ten monitoring events) and the results were documented in the ten Status Reports (2011 through December 2015). The groundwater was also monitored prior to the VRP from 2000 through 2010. The VRP and prior groundwater monitoring results, along with the fate-and-transport groundwater modeling, indicated the VOC groundwater plumes will stabilize and recede before constituent concentrations exceed MCLs at the property line. In the VRP CSR, submitted in March 2016, it was proposed that monitoring of the groundwater be discontinued and seep and surface water monitoring be conducted annually to confirm that the rip-rap blanket has been effective in precluding the surface expression of seep waters containing constituents at concentrations above ISWQC and that seep waters in uncovered seeps do not exceed ISWQC along with continued evaluation of concentration trends.

3.1.1 Seep Samples

Water samples were collected on November 13, 2017 from five of the seven seeps (MB#2, Seep 2, Seep G, Seep H, and Seep I) as listed Appendix G of the VRP CSR. Seeps B and L were dry during the sampling event and were not sampled. Seeps MB#2 and H are encased in perforated plastic culvert-style pipes inserted over the original seep locations when the rip-rap blanket was installed in 2012. Samples of the seep water were collected by directly filling pre-cleaned and preserved sample containers with water that appeared at the ground surface. These seep samples were analyzed for site-specific VOCs including 1,4-dioxane using USEPA Method 8260B. The seep sample analytical results are summarized on Table 1; the field sampling forms and laboratory reports are provided in Appendix A. The November 2017 seep samples were analyzed by Pace Analytical Laboratory in Huntersville, North Carolina.

3.1.2 Surface Water Samples

Surface water samples were collected from Manson Branch on November 13, 2017. Surface water samples were collected from four stream locations (MB#3, MB#5, MB#15, and MB#16). Samples of the surface water were collected by submerging and directly filling the pre-cleaned and preserved sample containers with surface water. The surface water samples were analyzed for site-specific VOCs and 1,4-dioxane using USEPA Method 8260B. The surface water sample analytical results are summarized on Table 1, and the field sampling forms and the laboratory reports are provided in Appendix A. The surface water samples were analyzed by Pace Analytical Laboratory in Huntersville, North Carolina.

3.1.3 Inspections of the Engineering Controls

The area of the main building floor slab covering the former degreasing operations and the rip-rap blanket have been designated as engineering controls (Figure 1). The building floor slab prevents exposure to VOC-impacted soils underlying the building in the area of the former degreasers. The rip-rap blanket precludes the surface expression of seep waters with VOC concentrations above the ISWQC. Both structures were visually inspected during the November 2017 sampling event to evaluate if they were functioning as intended.

Designated Area of the Building Floor Slab

The building is currently vacant. The floor slab in the middle third of the building (Figure 1) where degreasing operations were conducted and where releases to soil exceeding Risk Reduction Standards have been detected was inspected. The floor slab in the degreaser area is functioning as a designated engineering control in preventing direct exposure to VOC-impacted soils in this area. The inspection showed that there were no openings in the floor slab that would allow for direct contact with underlying soils. There was a half-inch separation between the wall and the floor in a building addition area on the west side of the main building, but there was no soil present in the separation and the separation did not appear to be a new occurrence. There was no visible evidence that repairs or recent wear had occurred.

Rip-Rap Blanket

The rip-rap blanket was constructed to preclude the surface expression of seep waters with VOC concentrations above the ISWQC. The inspection showed that the rip-rap blanket is functioning as designed and that seeps with VOCs concentrations above ISWQC (Seeps MB#2 and H) are covered by the rip-rap. The seep water was flowing beneath the rip-rap and not surfacing, there was no apparent sediment build-up, and the sampling vaults were in good condition. Some vegetation (weedy vegetation and leaf litter) and dead-fall trees limbs were present around the rip-rap material. The vegetation is not currently interfering with the function of the blanket and will be killed-off with winter weather. The blanket was cleared of vegetation in March 2017. Vegetation growth will need to be monitored to prevent vegetation from growing up through the blanket and clogging the pore spaces in the rip-rap.

As a result of surface water run-off along the side of the road that then crosses the road in a low-lying area, there is minor erosion at the end of the access road before it reaches the MB#2 rip-rap blanket area. The erosion does not interfere with the function of the blanket, but will need to be repaired in the future to limit further erosion of the access road. Appendix B contains the inspection checklists and photographs for the inspections.

3.1.4 Financial Assurance

The financial assurance for 2017 was submitted to EPD on May 1, 2017. The 2017 VRP financial assurance was a letter confirming the existing cost estimate and financial assurance amount continues to be sufficient to cover the cost of post-VRP CSR activities as presented in the VRP CSR (March 2016). An Irrevocable Standby Letter of Credit in the amount of $396,237.00 that automatically renews annually was provided to the EPD in May 2011 for the VRP financial assurance.

3.2 Analytical Results

The following sections describe the results of the analysis of the November 2017 seep and surface water samples.

3.2.1 Seeps

Historic seep sampling results, including those collected in November 2017, are presented on Table 1. The reported November 2017 VOC concentrations in seep samples are similar to those recently reported. Consistent with the 2016 sampling results, the sample from Seep H exceeded Georgia ISWQC for TCE while the sample from Seep MB#2 exceeded for vinyl chloride. Both seeps are beneath the rip-rap blanket. No VOCs were detected at concentrations exceeding Georgia ISWQC in seeps (Seeps #2, G, and I) located outside the riprap blanket.

Figures 2 through 7 show time trend plots of six VOCs detected in the seeps for the period from late 2011 through 2017. These figures illustrate that VOC concentrations in most seeps have been relatively stable or are decreasing. Increases in cis-1,2-dichloroethene were observed in samples from several seeps, most notably in samples from Seep H.

3.2.2 Surface Water

Surface water samples were collected from the four designated sampling locations in Manson Branch (MB#3, MB#5, MB#15, and MB#16) and were analyzed for site-specific VOCs and 1,4-dioxane. Consistent with sampling results for the past 17 years, no constituents were detected in the Manson Branch surface water samples (Table 1).

4.0 PLANNED 2018 ACTIVITIES

The activities planned for 2018 include sampling, inspection, and reporting conducted annually as described in the March 10, 2016 VRP CSR. Additional activities will be those conducted in response to EPD's review of Ingersoll Rand's January 31, 2018 submittal addressing EPD's November 30, 2017 comments on the CSR. Specifically, it is anticipated the 2018 activities will include the following:

- In the Spring, vegetation growth will be cleared from the rip-rap blankets and the area above the check dam will be re-inspected.
- Annual seep and surface water sampling will be conducted in November. The engineering controls (rip-rap blanket and building floor slab) will be inspected. A report or the sampling results and inspection observations will be prepared upon receipt of the analytical results.
- Ingersoll Rand's responses to EPD comments on the March 10, 2016 VRP CSR will be submitted to EPD on January 31, 2018. Any activities required as part of that submittal will be conducted during the year.

TABLE

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Manson Branch #1**			**Manson Branch #2 (MB#2)**										
Sample Location		**Surface water in Manson Branch south side of Hwy 24 Bridge**			**Seep in a Draw Down Slope of Thermo King plant building**										
Sample Date		**5/3/2000**			**5/3/2000**			**11/2/2000**	**1/15/2003**	**3/24/2004**	**6/23/2004**	**8/31/2004**	**11/17/2004**	**2/27/2008**	**4/21/2010**
Laboratory		**Lancaster Labs**	**STL- North Canton**	**Savannah Labs**	**Lancaster Labs**	**STL- North Canton**	**Savannah Labs**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**Test America - North Canton**	**Test America - North Canton**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**														
1,1,1-Trichloroethane	not established	<5.0	<5.0	<5.0	**200**	**160**	**170**	**290**	**15**	**39**	**300**	**1900**	**320**	**8.4**	
1,1,2-Trichloroethane	16	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<5.0	
1,1-Dichloroethene	7100	<5.0	<5.0	<5.0	**69**	**50**	**52**	**97**	**12**	**24**	<250	**1000**	**210**	**11**	
1,1-Dichloroethane	not established	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<5.0	
1,4-Dioxane	not established	<250	<250	NA	<250	<830	NA	<1200	<200	<330	<12000	<31000	<9600	<250	
Bromomethane	1500	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<10.0	
Chloroethane	not established	<5.0	<10.0	<5.0	<5.0	<33	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<10.0	
Chloroform	470	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<5.0	
Chloromethane	not established	<5.0	<10.0	<5.0	<5.0	<33	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<10.0	
cis-1,2-Dichloroethene	not established	<5.0	<2.5	<5.0	**36**	**30**	**27**	**59**	**36**	**61**	<250	<620	<190	**89**	DRY
Ethylbenzene	2100	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<5.0	
p-Isopropyltoluene	not established	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	NA	NA	NA	NA	NA	<5.0	not sampled
Toluene	5980	<5.0	<5.0	<5.0	<5.0	<17	<5.0	<25.0	<4.0	<6.7	<250	<620	<190	<5.0	
trans-1,2-Dichloroethene	10000	<5.0	<2.5	<5.0	<5.0	<8.3	<5.0	<12	<2.0	<6.7	<250	<620	<190	<2.5	
Trichloroethene	30	<5.0	<5.0	<5.0	**490**	**460**	**440**	**720**	**120**	**210**	**1300**	**4400**	**930**	**310**	
Vinyl Chloride	2.4	<2.0	<5.0	<5.0	<2.0	<6.7	<2.0	<10.0	<4.0	<6.7	<100	<250	<77	<4.0	
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Manson Branch #2 (MB#2)**															
Sample Location		**Seep in a Draw Down Slope of Thermo King plant building**															
Sample Date		**6/2/2010**	**6/7/2011**	**1/17/2012**	**7/10/2012**	**8/7/2012**	**11/19/2012**	**1/8/2013**	**4/11/2013**	**7/10/2013**	**1/9/2014**	**6/24/2014**	**1/14/2015**	**7/9/2015**	**12/15/2015**	**11/17/2016**	**11/13/2017**
Laboratory		**Test America - North Canton**	**Test America - Tampa**	**AES-Atlanta**	**AES-Atlanta**	**AES-Atlanta**	**AES-Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																
1,1,1-Trichloroethane	not established	**61**	**21**	**13**	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	16	<50	**1.2**	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7100	**160**	**50**	**53**	**7.3**	**1.4**	**20**	**17**	**14**	**1.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	not established	<50	**1.5**	**1.5**	**2.5**	**4.4**	**6.9**	**8.2**	**8.7**	**3.1**	**2.4**	**4.7**	**3.2**	**2.2**	**3.1**	**1.6**	<1.0
1,4-Dioxane	not established	<2500	NA	<100	<100	<100	NA	<250	<50	<50	<150	<150	<150	<150	<150	<150	<150
Bromomethane	1500	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<2.0	**2**	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane	not established	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**3.8**	**1.3**	<1.0	**1.8**	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	470	<50	**1.5**	**1.3**	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	not established	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	not established	**180**	**70**	**85**	**95**	**46**	**170**	**170**	**130**	**18**	**6.5**	**12.2**	**3.8**	**3.3**	**6.8**	**5.9**	**14.3**
Ethylbenzene	2100	<50	<1.0	<1.0	**4.6**	**13**	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	not established	<50	<1.0	<1.0	**5.0**	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	5980	<50	**2.5**	<1.0	**180**	**22**	<1.0	<5.0	<1.0	<1.0	<1.0	**5.1**	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	10000	<50	<1.0	<1.0	<1.0	**2.3**	**2.2**	<5.0	**2.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	30	**1700**	**280**	**340**	**16**	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.2**
Vinyl Chloride	2.4	<50	**2.5**	**2.5**	**20**	**9.3**	**84**	**71**	**81**	**21**	**13.8**	**31**	**15**	**12.4**	**30.6**	**18.1**	**6.3**
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	<20	NA	NA	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	0	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Manson Branch #3 (MB#3)													Manson Branch #4
Sample Location		Surface water in Manson Branch located 500 ft downstream of Hwy 24													Surface water in Manson Branch located 700 ft downstream of Hwy 24
Sample Date		6/7/2000	6/7/2011	1/17/2012	7/10/2012	1/8/2013	7/10/2013	1/9/2014	6/24/2014	1/14/2015	7/10/2015	12/16/2015	11/17/2016	11/13/2017	6/7/2000
Laboratory		STL- North Canton	TestAmerica - Tampa	AES-Atlanta	AES-Atlanta	Test America - North Canton	Test America - North Canton	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	STL- North Canton
Constituent (ug/L)	Georgia Instream Water Quality Criteria (µg/L)														
1,1,1-Trichloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
1,1,2-Trichloroethane	16	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
1,1-Dichloroethene	7100	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
1,1-Dichloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
1,4-Dioxane	not established	<250	NA	<100	<100	<50	<50	<150	<150	<150	<150	<150	<150	<150	<250
Bromomethane	1500	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0
Chloroethane	not established	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
Chloroform	470	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
Chloromethane	not established	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0
cis-1,2-Dichloroethene	not established	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5
Ethylbenzene	2100	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
p-Isopropyltoluene	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
Toluene	5980	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
trans-1,2-Dichloroethene	10000	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5
Trichloroethene	30	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
Vinyl Chloride	2.4	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Manson Branch #5 (MB#5)													Manson Branch #6	Manson Branch #7	Manson Branch #8	Manson Branch #9	Manson Branch #10	Manson Branch #11	Manson Branch #12
Sample Location		**Surface water in Manson Branch located 900 ft downstream of Hwy 24**													**Surface water in Manson Branch located 1100 ft downstream of Hwy 24**	**Surface water in Manson Branch located 1300 ft downstream of Hwy 24**	**Surface water in Manson Branch located 1575 ft downstream of Hwy 24**	**Surface water in Manson Branch located 2900 ft upstream of Hwy 17**	**Surface water in Manson Branch located 2100 ft upstream of Hwy 17**	**Surface water in Manson Branch located 1200 ft upstream of Hwy 17**	**Surface water in Manson Branch located at Hwy 17 bridge**
Sample Date		**6/7/2000**	**6/7/2011**	**1/17/2012**	**7/10/2012**	**1/8/2013**	**7/10/2013**	**1/9/2014**	**6/24/2014**	**1/14/2015**	**7/10/2015**	**12/16/2015**	**11/17/2016**	**11/13/2017**	**6/7/2000**	**6/7/2000**	**6/7/2000**	**6/6/2000**	**6/6/2000**	**6/6/2000**	**6/6/2000**
Laboratory		**STL- North Canton**	**TestAmerica - Tampa**	**AES-Atlanta**	**AES-Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																				
1,1,1-Trichloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	16	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7100	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	not established	<250	NA	<100	<100	<50	<50	<150	<150	<150	<150	<150	<150	<150	<250	<250	<250	<250	<250	<250	<250
Bromomethane	1500	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chloroethane	not established	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chloroform	470	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	not established	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
cis-1,2-Dichloroethene	not established	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Ethylbenzene	2100	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
p-Isopropyltoluene	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	5980	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	10000	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Trichloroethene	30	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2.4	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Manson Branch #14			Manson Branch #15 (MB#15)														
Sample Location		Surface water in Manson Branch located at Hwy 24 bridge			Surface water in Manson Branch located about 450 ft downstream of Hwy 24 bridge														
Sample Date		1/15/2003	2/26/2008	4/22/2010	1/15/2003	2/27/2008	4/21/2010	6/7/2011	1/17/2012	7/10/2012	1/8/2013	7/10/2013	1/9/2014	6/24/2014	1/14/2015	7/10/2015	12/16/2015	11/17/2016	11/13/2017
Laboratory		STL- North Canton	Test America - North Canton	Test America - North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	Test America - North Canton	AES-Atlanta	AES-Atlanta	Test America - North Canton	Test America - North Canton	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical
Constituent (ug/L)	Georgia Instream Water Quality Criteria (µg/L)																		
1,1,1-Trichloroethane	not established	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	16	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7100	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	not established	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane	not established	<200	<250	<250	<200	<250	<250	NA	<100	<100	<50	<50	<150	<150	<150	<150	<150	<150	<150
Bromomethane	1500	<1.0	<10.0	<10.0	<1.0	<10.0	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane	not established	<1.0	<10.0	<10.0	<1.0	<10.0	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	470	<1.0	<1.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	not established	<1.0	<1.0	<1.0	<1.0	<10.0	<10.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	not established	<0.50	<2.5	<2.5	<0.50	<2.5	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	2100	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	not established	NA	<5.0	<5.0	NA	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	5980	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	10000	<0.50	<2.5	<2.5	<0.50	<2.5	<2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	30	<1.0	<5.0	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	2.4	<1.0	<2.0	<2.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Manson Branch #16 (MB#16)**															
Sample Location		**Surface water in Manson Branch located about 700 ft downstream of Hwy 24 bridge, opposite side of stream from wells MW-16/MW-18**															
Sample Date		**1/15/2003**	**2/27/2008**	**4/21/2010**	**6/7/2000**	**6/7/2011**	**1/17/2012**	**7/10/2012**	**1/8/2013**	**7/10/2013**	**1/9/2014**	**6/27/2014**	**1/14/2015**	**7/10/2015**	**12/15/2015**	**11/17/2016**	**11/13/2017**
Laboratory		**STL- North Canton**	**Test America - North Canton**	**Test America - North Canton**	**STL- North Canton**	**Test America - Tampa**	**AES-Atlanta**	**AES-Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**		**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																
1,1,1-Trichloroethane	not established	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	16	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7100	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	not established	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane	not established	<200	<250	<250		NA	<100		<50	<50	<150		<150	<150	<150	<150	<150
Bromomethane	1500	<1.0	<10.0	<10.0	<5.0	<5.0	<5.0		<1.0	<1.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane	not established	<1.0	<10.0	<10.0	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	470	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	not established	<1.0	<10.0	<10.0	<10	<5.0	<5.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	not established	<0.50	<2.5	<2.5	<2.5	<1.0	<1.0	DRY	<1.0	<1.0	<1.0	DRY	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	2100	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	not established	NA	<5.0	<5.0	<5.0	<1.0	<1.0	not sampled	<1.0	<1.0	<1.0	not sampled	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	5980	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	10000	<0.50	<2.5	<2.5	<2.5	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	30	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	2.4	<1.0	<2.0	<2.0	<5.0	<1.0	<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA		<2.0	NA		NA	NA	NA		NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Manson Branch Seep West #2 (Seep #2)															
Sample Location		Seep Located 350 ft downstream of Hwy 24 on the west bank															
Sample Date		6/7/2000	11/2/2000	1/15/2003	3/24/2004	June 6-7, 2000	6/23/2004	8/30/2004	June 6-7, 2000	11/17/2004	2/27/2008	4/21/2010	6/7/2000	6/7/2011	1/17/2012	7/10/2012	8/7/2012
Laboratory		STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	STL- North Canton	Test America - Tampa	AES-Atlanta	AES-Atlanta	AES-Atlanta
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																
1,1,1-Trichloroethane	not established	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	16	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7100	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**1.7**	<1.0	<1.0
1,1-Dichloroethane	not established	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
1,4-Dioxane	not established	<250	<250	<200	<250		<250	<250		<250	<250	<250		NA	<100	<100	<100
Bromomethane	1500	<10.0	<10.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
Chloroethane	not established	<10.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
Chloroform	470	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
Chloromethane	not established	<10.0	<5.0	<1.0	<5.0	<10	<5.0	<5.0		<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	not established	**3.8**	**7.9**	<0.50	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	**4.4**	**5.7**	**4.0**	**8.2**
Ethylbenzene	2100	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	not established	<5.0	<5.0	NA	NA	<5.0	NA	NA		NA	<5.0	<5.0		**4.5**	<1.0	<1.0	<1.0
Toluene	5980	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**2.0**	<1.0	**33**	**26**
trans-1,2-Dichloroethene	10000	<2.5	<2.5	<0.50	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	<1.0	<1.0	<1.0	<1.0
Trichloroethene	30	<5.0	**5.4**	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	**7.4**	<1.0	**1.4**
Vinyl Chloride	2.4	<2.0	<2.0	<1.0	<2.0		<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	**1.4**	<1.0	<1.0	<1.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA		NA	NA		NA	NA	NA		<2.0	NA	NA	<5.0

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Manson Branch Seep West #2 (Seep #2)											Seep A						
Sample Location		Seep Located 350 ft downstream of Hwy 24 on the west bank											Northeast CornerThermo King Eastern Parcel						
Sample Date		11/19/2012	1/8/2013	4/11/2013	7/10/2013	1/9/2014	6/24/2014	1/14/2015	7/9/2015	12/15/2015	11/17/2016	11/13/2017	1/15/2003	3/24/2004	6/23/2004	8/31/2004	11/17/2004	2/26/2008	4/21/2010
Laboratory		AES-Atlanta	TestAmerica - NorthCanton	TestAmerica - NorthCanton	TestAmerica - NorthCanton	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																		
1,1,1-Trichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
1,1-Dichloroethene	7100	**3.7**	**4.6**	**3.1**	**1.2**	<1.0	<1.0	<1.0	<1.0	**1.0**	<1.0	**1.1**	<1.0		<5.0	<5.0		<5.0	
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
1,4-Dioxane	not established	NA	<50	<50	<50	<150	<150	<150	<150	<150	<150	<150	<200		<250	<250		<250	
Bromomethane	1500	<5.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0		<5.0	<5.0		<10.0	
Chloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<10.0	
Chloroform	470	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
Chloromethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<10.0	
cis-1,2-Dichloroethene	not established	**23**	**21**	**18**	**11**	**3**	**7.1**	**3.9**	**13.4**	**8.1**	**6.6**	**15.3**	<0.50	DRY	<5.0	<5.0	DRY	<2.5	DRY
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
p-Isopropyltoluene	not established	**2.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	not sampled	NA	NA	not sampled	<5.0	not sampled
Toluene	5980	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<5.0	<5.0		<5.0	
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50		<5.0	<5.0		<2.5	
Trichloroethene	30	**23**	**26**	**13**	**4.5**	**2.5**	**1.7**	**6.1**	**1.0**	**6.9**	**3.2**	**2.8**	<1.0		<5.0	<5.0		<5.0	
Vinyl Chloride	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<2.0	<2.0		<2.0	
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA		NA	

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep B											
Sample Location		Thermo King Eastern Parcel											
Sample Date		1/15/2003	3/24/2004	6/23/2004	8/30/2004	11/17/2004	2/27/2008	4/21/2010	6/3/2010	June 2011	1/17/2012	7/10/2012	8/7/2012
Laboratory		STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	Test America - North Canton	Test America - Tampa	AES-Atlanta	AES-Atlanta	AES-Atlanta
Constituent (ug/L)	Georgia Instream Water Quality Criteria (µg/L)												
1,1,1-Trichloroethane	not established	<1.0	<5.0	<5.0	<5.0	**10**	<5.0				<1.0		
1,1,2-Trichloroethane	16	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0				<1.0		
1,1-Dichloroethene	7100	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0				<1.0		
1,1-Dichloroethane	not established	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0				<1.0		
1,4-Dioxane	not established	<200	<250	<250	<250	<420	<250				<100		
Bromomethane	1500	<1.0	<5.0	<5.0	<5.0	<8.4	<10.0				<5.0		
Chloroethane	not established	<1.0	<5.0	<5.0	<5.0	<8.4	<10.0				<5.0		
Chloroform	470	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0				<1.0		
Chloromethane	not established	<1.0	<5.0	<5.0	<5.0	<8.4	<10.0				<5.0		
cis-1,2-Dichloroethene	not established	<0.50	<5.0	<5.0	<5.0	**16**	<2.5	DRY	DRY	DRY	<1.0	DRY	DRY
Ethylbenzene	2100	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0	not sampled	not sampled	not sampled	<1.0	not sampled	not sampled
p-Isopropyltoluene	not established	NA	NA	NA	NA	NA	<5.0				<1.0		
Toluene	5980	<1.0	<5.0	<5.0	<5.0	<8.4	<5.0				<1.0		
trans-1,2-Dichloroethene	10000	<0.50	<5.0	<5.0	<5.0	<8.4	<2.5				<1.0		
Trichloroethene	30	<1.0	<5.0	<5.0	<5.0	**41**	<5.0				**2.9**		
Vinyl Chloride	2.4	<1.0	<2.0	<2.0	<2.0	<3.3	<2.0				<1.0		
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA				NA		

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Seep B**									
Sample Location		**Thermo King Eastern Parcel**									
Sample Date		**11/19/2012**	**1/8/2013**	**4/11/2013**	**7/10/2013**	**1/9/2014**	**6/24/2014**	**1/14/2015**	**7/9/2015**	**12/15/2015**	**11/17/2016 and 11/13/2017**
Laboratory		**AES- Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**		**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**										
1,1,1-Trichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
1,1-Dichloroethene	7100	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
1,4-Dioxane	not established	NA	<50	<50	<50	<150		<150		<150	
Bromomethane	1500	<5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
Chloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
Chloroform	470	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
Chloromethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
cis-1,2-Dichloroethene	not established	<1.0	<1.0	**27**	**5.2**	**3**	DRY	**9.3**	DRY	**7.9**	DRY
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
p-Isopropyltoluene	not established	<1.0	<1.0	<1.0	<1.0	<1.0	not sampled	<1.0	not sampled	<1.0	not sampled
Toluene	5980	<1.0	<1.0	**12**	**1.5**	<1.0		<1.0		**1.7**	
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
Trichloroethene	30	<1.0	<1.0	**6.3**	**1.2**	**1.4**		**2**		**1.5**	
Vinyl Chloride	2.4	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	<5.0	NA	NA	NA	NA		NA		NA	

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Seep C**												**Seep D**						
Sample Location		**Thermo King Eastern Parcel, down slope of the draw**												**Thermo King Eastern Parcel**						
Sample Date		**1/15/2003**	**3/24/2004**	**6/23/2004**	**8/31/2004**	**11/17/2004**	**2/27/2008**	**4/21/2010**	**6/2/2010**	**6/7/2011**	**1/17/2012**	**7/10/2012 (not sampled at Seep C location)**	**8/7/2012**	**1/15/2003**	**3/24/2004**	**6/23/2004**	**8/31/2004**	**11/17/2004**	**2/27/2008**	**4/21/2010**
Laboratory		**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Test America - Tampa**	**AES-Atlanta**	**AES-Atlanta**	**AES-Atlanta**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**STL- North Canton**	**Test America - North Canton**	**Test America - North Canton**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																			
1,1,1-Trichloroethane	not established	**120**	<140	<5.0	**380**	**380**	**49**	**28**	NA	**32**	**32**	<1.0		<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	16	<25	<140	<5.0	<310	<190	<10.0	<12	NA	**1.0**	<1.0	<1.0		<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7100	**110**	<140	<5.0	<310	**240**	**99**	**64**	NA	**87**	**140**	**1.8**	Seep C	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	not established	<25	<140	<5.0	<310	<190	<10.0	<12	NA	<1.0	**4.0**	**7.3**	covered	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	not established	<1200	<7100	<250	<16000	<9600	<500	<620	NA	NA	<100	<100	with	<200	<250	<250	<250	<250	<250	<250
Bromomethane	1500	<1.0	<140	<5.0	<310	<190	<20.0	<25	NA	<5.0	<5.0	<5.0	rip-rap	<1.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
Chloroethane	not established	<25	<140	<5.0	<310	<190	<20.0	<25	NA	<5.0	<5.0	<5.0	and is no	<1.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
Chloroform	470	<25	<140	<5.0	<310	<190	<10.0	<12	NA	**2.3**	**2.5**	<1.0	longer	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	not established	<25	<140	<5.0	<310	<190	<20.0	<25	NA	<5.0	<5.0	<5.0	sampled	<1.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
cis-1,2-Dichloroethene	not established	**13**	<140	<5.0	<310	<190	**11**	**12**	NA	**19**	**130**	**32**		<0.50	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5
Ethylbenzene	2100	<25	<140	<5.0	<310	<190	<10.0	<12	NA	<1.0	<1.0	**25**		<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
p-Isopropyltoluene	not established	NA	NA	NA	NA	NA	<10.0	<12	NA	<1.0	<1.0	<1.0		NA	NA	NA	NA	NA	<5.0	<5.0
Toluene	5980	<25	<140	<5.0	<310	<190	<10.0	<12	NA	<1.0	<1.0	**180**		<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	10000	<12	<140	<5.0	<310	<190	<5.0	<12	NA	<1.0	<1.0	<1.0		<0.50	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5
Trichloroethene	30	**840**	**720**	<5.0	**1300**	**1000**	**670**	**500**	NA	**530**	**880**	<1.0		<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl Chloride	2.4	<25	<57	<2.0	<120	<77	<10.0	<12	NA	<1.0	**11**	**14**		<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA	NA	<5.0	<20	NA	NA		NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep E			Seep F			Seep G											
Sample Location		South portion Thermo King Eastern Parcel			South portion Thermo King Eastern Parcel			Thermo King Eastern Parcel											
Sample Date		1/15/2003	3/24/2004 and 6/23/2004	8/31/2004 and 11/17/2004	1/15/2003	3/24/2004 and 6/23/2004	8/31/2004 and 11/17/2004	1/15/2003	3/24/2004	6/23/2004	8/31/2004	11/17/2004	2/26/2008	4/21/2010	June 2011	1/17/2012	7/10/2012	8/7/2012	11/19/2012
Laboratory		STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	Test America - Tampa	AES-Atlanta	AES-Atlanta	AES-Atlanta	AES-Atlanta
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																		
1,1,1-Trichloroethane	not established	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	16	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	7100	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		**1.9**	**5.2**	<1.0	<1.0
1,1-Dichloroethane	not established	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
1,4-Dioxane	not established							<200	<250	<250	<360	<250	<250	<250		<100	<100	<100	NA
Bromomethane	1500							<1.0	<5.0	<5.0	<7.2	<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
Chloroethane	not established							<1.0	<5.0	<5.0	<7.2	<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
Chloroform	470	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
Chloromethane	not established	<1.0	DRY	DRY	<1.0	DRY	DRY	<1.0	<5.0	<5.0	<7.2	<5.0	<10.0	<10.0		<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	not established	<0.50			<0.50			**0.73**	**13**	**9.3**	<7.2	<5.0	<2.5	**7.7**	DRY	**7.4**	**49**	**6.2**	**7.6**
Ethylbenzene	2100	<1.0	not sampled	not sampled	<1.0	not sampled	not sampled	<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	not established	NA			NA			NA	NA	NA	NA	NA	<5.0	<5.0	not sampled	<1.0	<1.0	<1.0	**2.6**
Toluene	5980	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	<5.0		<1.0	**6.4**	**2.4**	<1.0
trans-1,2-Dichloroethene	10000	<0.50			<0.50			<0.50	<5.0	<5.0	<7.2	<5.0	<2.5	<2.5		<1.0	<1.0	<1.0	<1.0
Trichloroethene	30	<1.0			<1.0			<1.0	<5.0	<5.0	<7.2	<5.0	<5.0	**7.8**		**2.6**	<1.0	<1.0	**3.8**
Vinyl Chloride	2.4	<1.0			<1.0			<1.0	<2.0	<2.0	<2.9	<2.0	<2.0	<2.0		<1.0	<1.0	<1.0	<1.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established							NA	NA	NA	NA	NA	NA	NA		NA	NA	<5.0	<5.0

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep G										Seep H						
Sample Location		Thermo King Eastern Parcel										Thermo King Eastern Parcel						
Sample Date		1/8/2013	4/11/2013	7/10/2013	1/9/2014	6/24/2014	1/14/2015	7/9/2015	12/15/2015	11/17/2016	11/13/2017	1/15/2003	3/24/2004	6/23/2004	8/31/2004	11/17/2004	2/26/2008	4/21/2010
Laboratory		Test America - North Canton	Test America - North Canton	Test America - North Canton	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**																	
1,1,1-Trichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	7100	**2.2**	**1.7**	<1.0	<1.0	**1.6**	**1.5**	**2.4**	**1.2**	**1.6**	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	**6.0**
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
1,4-Dioxane	not established	<50	<50	<50	<150	<150	<150	<150	<150	<150	<150	<200	<250	<420	<250	<250	<250	<250
Bromomethane	1500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<1.0	<5.0	<8.4	<5.0	<5.0	<10.0	<10.0
Chloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<10.0	<10.0
Chloroform	470	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
Chloromethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20J	<1.0	<1.0	**1.7**	<1.0	<5.0	<8.4	<5.0	<5.0	<10.0	<10.0
cis-1,2-Dichloroethene	not established	**11**	**9.7**	**6.4**	**3.2**	**11**	**9.6**	**20.2**	**11**	**12.7**	**2.0**	**6.9**	**12**	**30**	**13**	**27**	<2.5	**26**
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
p-Isopropyltoluene	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<1.0	NA	NA	NA	NA	NA	<5.0	<5.0
Toluene	5980	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<8.4	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<5.0	<8.4	<5.0	<5.0	<2.5	<2.5
Trichloroethene	30	**4.8**	**7.0**	<1.0	<1.0	<1.0	**2.4**	<1.0	<1.0	**2.0**	<1.0	**24**	**15**	<8.4	<5.0	**7.1**	**5.1**	**38**
Vinyl Chloride	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<3.3	<2.0	<2.0	<2.0	<2.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Seep H**												
Sample Location		**Thermo King Eastern Parcel**												
Sample Date		**6/3/2010**	**June 2011**	**1/17/2012**	**7/10/2012**	**8/7/2012**	**11/19/2012**	**1/8/2013**	**4/11/2013**	**7/10/2013**	**1/9/2014**	**6/24/2014**	**1/14/2015**	**7/9/2015**
Laboratory		**Test America - North Canton**	**Test America - Tampa**	**AES-Atlanta**	**AES-Atlanta**	**AES-Atlanta**	**AES-Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**													
1,1,1-Trichloroethane	not established	<2.0		<1.0	<1.0	**15**	**20**	<20	**12**	**9.6**	**4**	**3.5**	**3.1**	**1.4**
1,1,2-Trichloroethane	16	<2.0		<1.0	<1.0	<1.0	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
1,1-Dichloroethene	7100	**12**		**2.3**	**6.7**	**69**	**140**	**84**	**77**	**58**	**29.1**	**27.9**	**25.8**	**21.2**
1,1-Dichloroethane	not established	<2.0		<1.0	**2.0**	**1.1**	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
1,4-Dioxane	not established	<100		<100	<100	<100	NA	<1000	<130	<84	<150	<150	<300	<150
Bromomethane	1500	<2.0		<5.0	<5.0	<5.0	<5.0	<20	<2.5	<1.7	<2.0	<2.0	<4.0	**3.4**
Chloroethane	not established	<2.0		<5.0	<5.0	<5.0	<5.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
Chloroform	470	<2.0		<1.0	<1.0	**2.6**	**2.3**	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
Chloromethane	not established	<2.0		<5.0	<5.0	<5.0	<5.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
cis-1,2-Dichloroethene	not established	**63**	DRY	**16**	**110**	**120**	**64**	**47**	**45**	**64**	**22.3**	**45.2**	**33.8**	**75.9**
Ethylbenzene	2100	<2.0		<1.0	<1.0	<1.0	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
p-Isopropyltoluene	not established	<2.0	not sampled	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
Toluene	5980	<2.0		<1.0	**170**	**19**	**1.6**	<20	<2.5	**1.8**	<1.0	<1.0	<2.0	<1.0
trans-1,2-Dichloroethene	10000	<2.0		<1.0	**3.8**	<1.0	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
Trichloroethene	30	**41**		**2.0**	<1.0	**800**	**550**	**610**	**530**	**490**	**180**	**185**	**359**	**157**
Vinyl Chloride	2.4	<2.0		<1.0	**31**	<1.0	<1.0	<20	<2.5	<1.7	<1.0	<1.0	<2.0	<1.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA		NA	NA	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep H			Seep I										
Sample Location		Thermo King Eastern Parcel			Thermo King Eastern Parcel										
Sample Date		12/15/2015	11/17/2016	11/13/2017	1/15/2003	3/24/2004	6/23/2004	8/30-31/2004	11/17/2004	2/27/2008	4/22/2010	6/7/2011	1/17/2012	7/10/2012	8/7/2012
Laboratory		Pace Analytical	Pace Analytical	Pace Analytical	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	Test America - Tampa	AES-Atlanta	AES-Atlanta	
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**														
1,1,1-Trichloroethane	not established	**3.1**	**1.2**	<1.0	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	<1.0	<1.0	**9.5**	
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	
1,1-Dichloroethene	7100	**30.7**	**19.4**	**19.5**	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	**9.3**	<1.0	**60**	
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	**1.9**	<1.0	<1.0	
1,4-Dioxane	not established	<150	<150	<150	<200	<250	<250		<250	<250	<250	NA	<100	<100	
Bromomethane	1500	<2.0	<2.0	<2.0	<1.0	<5.0	<5.0		<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	
Chloroethane	not established	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	
Chloroform	470	**1.5**	**1.3**	**1.5**	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	<1.0	<1.0	**2.2**	
Chloromethane	not established	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	
cis-1,2-Dichloroethene	not established	**40.1**	**32.9**	**87.6**	<0.50	<5.0	<5.0	DRY	<5.0	<2.5	<2.5	**64**	<1.0	**68**	DRY
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	
p-Isopropyltoluene	not established	<1.0	<1.0	<1.0	NA	NA	NA	not sampled	NA	<5.0	<5.0	**1.4**	<1.0	<1.0	not sampled
Toluene	5980	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	**2.3**	<1.0	**17**	
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<0.50	<5.0	<5.0		<5.0	<2.5	<2.5	<1.0	<1.0	<1.0	
Trichloroethene	30	**275**	**169**	**218**	<1.0	<5.0	<5.0		<5.0	<5.0	<5.0	**2.5**	<1.0	**380**	
Vinyl Chloride	2.4	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0		<2.0	<2.0	<2.0	<1.0	<1.0	<1.0	
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA		NA	NA	NA	<2.0	NA	NA	

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep I											Seep J					Seep J	
Sample Location		Thermo King Eastern Parcel											Thermo King Eastern Parcel					Thermo King Eastern Parcel	
Sample Date		11/19/2012	1/8/2013	4/11/2013	7/10/2013	1/9/2014	6/27/2014	1/14/2015	7/9/2015	12/16/2015	11/17/2016	11/13/2017	5/14/2003	3/24/2004	6/23/2004	8/31/2004	11/17/2004	2/26/2008	4/22/2010
Laboratory		AES-Atlanta	Test America - North Canton	Test America - North Canton	Test America - North Canton	Pace Analytical		Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	Pace Analytical	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton
Constituent (ug/L)	Georgia Instream Water Quality Criteria (µg/L)																		
1,1,1-Trichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
1,1-Dichloroethene	7100	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
1,4-Dioxane	not established	NA	<50	<50	<50	<150		<150		<150	<150	<150	<1000	<250	<620	<1700	<1200	<250	<250
Bromomethane	1500	<5.0	<1.0	<1.0	<1.0	<2.0		<2.0		<2.0	<2.0	<2.0	<25	<5.0	<12.0	<33	<25	<10.0	<10.0
Chloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<10.0	<10.0
Chloroform	470	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
Chloromethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<10.0	<10.0
cis-1,2-Dichloroethene	not established	<1.0	<1.0	<1.0	**1.3**	<1.0	DRY	<1.0	DRY	**1.1**	<1.0	<1.0	**910**	**84**	**66**	**190**	**110**	<2.5	<2.5
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
p-Isopropyltoluene	not established	<1.0	<1.0	<1.0	<1.0	<1.0	not sampled	<1.0	not sampled	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	<5.0	<5.0
Toluene	5980	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	**280**	<5.0	<12.0	<33	<25	<5.0	<5.0
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	**13**	<5.0	<12.0	<33	<25	<2.5	<2.5
Trichloroethene	30	<1.0	<1.0	**4.2**	**1.9**	<1.0		<1.0		<1.0	<1.0	<1.0	<25	<5.0	<12.0	<33	<25	<5.0	<5.0
Vinyl Chloride	2.4	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<25	**26**	<5.0	<13	**11**	<2.0	<2.0
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	<5.0	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		Seep K						Seep L									
Sample Location		Northeast CornerThermo King Eastern Parcel						Northeast CornerThermo King Eastern Parcel									
Sample Date		3/24/2004	6/24/2004	8/31/2004	11/17/2004	2/26/2008	4/22/2010	3/24/2004	6/24/2004	8/31/2004	11/17/2004	2/27/2008	4/21/2010	6/3/2010	June 2011	1/17/2012	7/10/2012	8/7/2012
Laboratory		STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	STL- North Canton	STL- North Canton	STL- North Canton	STL- North Canton	Test America - North Canton	Test America - North Canton	Test America - North Canton	Test America - Tampa	AES-Atlanta	AES-Atlanta	AES-Atlanta
Constituent (ug/L)	Georgia Instream Water Quality Criteria (µg/L)																	
1,1,1-Trichloroethane	not established	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
1,1,2-Trichloroethane	16	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
1,1-Dichloroethene	7100	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
1,1-Dichloroethane	not established	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
1,4-Dioxane	not established	<250	<250	<1000	<250	<250	<250	<250	<250	<250	<250	<250		<50		<100		
Bromomethane	1500	<5.0	<5.0	<20	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0		<1.0		<5.0		
Chloroethane	not established	<5.0	<5.0	<20	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0		<1.0		<5.0		
Chloroform	470	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
Chloromethane	not established	<5.0	<5.0	<20	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10.0		<1.0		<5.0		
cis-1,2-Dichloroethene	not established	**10**	<5.0	**85**	<5.0	**12**	**5.3**	**5.4**	<5.0	<5.0	<5.0	<2.5	DRY	<1.0	DRY	<1.0	DRY	DRY
Ethylbenzene	2100	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	not sampled	<1.0	not sampled	<1.0	not sampled	not sampled
p-Isopropyltoluene	not established	NA	NA	NA	NA	<5.0	<5.0	NA	NA	NA	NA	<5.0		<1.0		<1.0		
Toluene	5980	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
trans-1,2-Dichloroethene	10000	<5.0	<5.0	<20	<5.0	<2.5	<2.5	<5.0	<5.0	<5.0	<5.0	<2.5		<1.0		<1.0		
Trichloroethene	30	<5.0	<5.0	<20	<5.0	**13**	**5.8**	<5.0	<5.0	<5.0	<5.0	<5.0		<1.0		<1.0		
Vinyl Chloride	2.4	<2.0	<2.0	<8	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		<1.0		<1.0		
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		

TABLE 1: SUMMARY OF DETECTED CONSTITUENTS IN SEEPS AND SURFACE WATER

Sample Identification		**Seep L**									
Sample Location		**Northeast CornerThermo King Eastern Parcel**									
Sample Date		**11/19/2012**	**1/8/2013**	**4/11/2013**	**7/10/2013**	**1/9/2014**	**6/24/2014**	**1/14/2015**	**7/9/2015**	**12/16/2015**	**11/17/2016**	**11/13/2017**
Laboratory		**AES-Atlanta**	**Test America - North Canton**	**Test America - North Canton**	**Test America - North Canton**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**	**Pace Analytical**
Constituent (ug/L)	**Georgia Instream Water Quality Criteria (µg/L)**											
1,1,1-Trichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
1,1,2-Trichloroethane	16	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
1,1-Dichloroethene	7100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
1,1-Dichloroethane	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
1,4-Dioxane	not established	NA	<50	<50	<50	<150	<150	<150		<150	<150	
Bromomethane	1500	<5.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0		<2.0	<2.0	
Chloroethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
Chloroform	470	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
Chloromethane	not established	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
cis-1,2-Dichloroethene	not established	**2.0**	**5.9**	**4.6**	<1.0	<1.0	<1.0	**2.4**	DRY	<1.0	<1.0	DRY
Ethylbenzene	2100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
p-Isopropyltoluene	not established	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	not sampled	<1.0	<1.0	not sampled
Toluene	5980	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
trans-1,2-Dichloroethene	10000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
Trichloroethene	30	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5**		<1.0	<1.0	
Vinyl Chloride	2.4	<1.0	**1.3**	**2.1**	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	
1,4-Dioxane - Selective Ion Monitoring SW8260B	not established	<5.0	NA	NA	<1.0	NA	NA	NA		NA	NA	

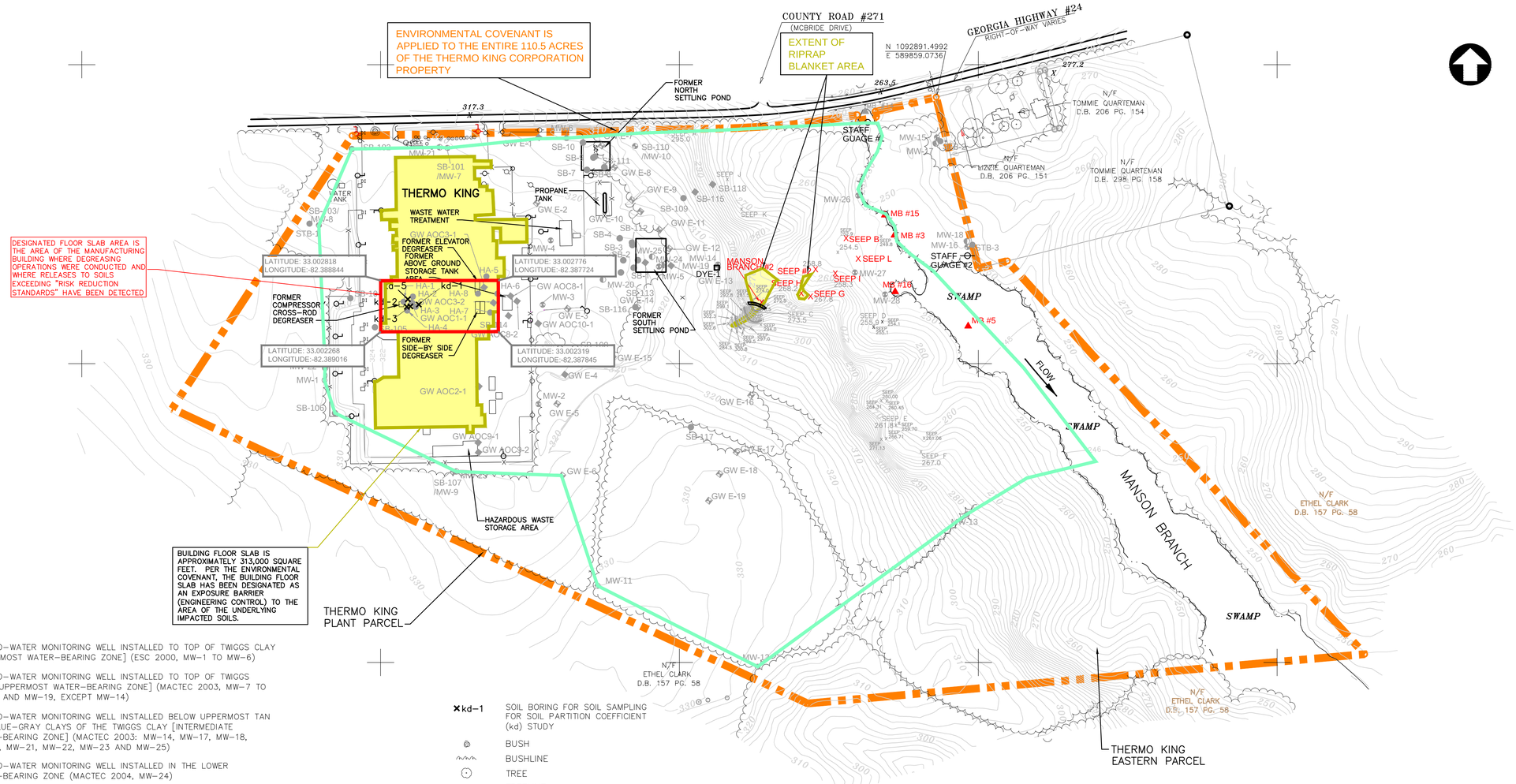
Notes:

µg/L	micrograms per liter
Hwy	Highway
NA	Sample not analyzed for this constituent
E	Estimated; result exceeds calibration range
(a)	Georgia 391-3-6-.03 Water Use Classifications and Water Quality Standards (ISWQC).
	Exceeds Georgia ISWQC
BOLD	**Detected Concentration**

Prepared by/Date: MHA 7/30/2015 DP 1/7/2016

Checked by/Date: RNQ 8/13/2015 1/14/2016 12/1/2016 MHA 12/14/2017

FIGURES



LEGEND

- MW–1 — GROUND–WATER MONITORING WELL INSTALLED TO TOP OF TWIGGS CLAY [UPPERMOST WATER–BEARING ZONE] (ESC 2000, MW–1 TO MW–6)
- MW–7 — GROUND–WATER MONITORING WELL INSTALLED TO TOP OF TWIGGS CLAY [UPPERMOST WATER–BEARING ZONE] (MACTEC 2003, MW–7 TO MW–16 AND MW–19, EXCEPT MW–14)
- MW–14 — GROUND–WATER MONITORING WELL INSTALLED BELOW UPPERMOST TAN AND BLUE–GRAY CLAYS OF THE TWIGGS CLAY [INTERMEDIATE WATER–BEARING ZONE] (MACTEC 2003: MW–14, MW–17, MW–18, MW–20, MW–21, MW–22, MW–23 AND MW–25)
- MW–24 — GROUND–WATER MONITORING WELL INSTALLED IN THE LOWER WATER–BEARING ZONE (MACTEC 2004, MW–24)
- GW E–2 — DIRECT–PUSH TECHNOLOGY BORING FOR GROUND–WATER SAMPLING (LAW 2000: GW E–1 TO GW E–19, UPPERMOST WATER–BEARING ZONE)
- GW E–1 — SOIL BORING FOR SOIL AND GROUND–WATER SAMPLING (LAW 2000 AND MACTEC 2003: GW E–1, GW E–4, GW E–13, GW AOC1–1, GW AOC2–1, GW AOC3–1, GW AOC3–2, GW AOC8–1, GW AOC8–2, GW AOC9–1, GW AOC9–2, GW AOC10–1, SB–113, SB–114, SB–115, AND SB–118, UPPERMOST WATER–BEARING ZONE)
- SB–7 — SOIL BORING FOR SOIL SAMPLING (ESC 2000 AND MACTEC 2003: SB–1 TO SB–10, SB–101 TO SB–112, SB–116 AND SB–117 AND HA–1 TO HA–8) (SOIL BORINGS FOR SOIL SAMPLING SB–101, SB–103, SB–107, SB–110 WERE COMPLETED AS MONITORING WELLS MW–7, MW–8, MW–9, AND MW–10 RESPECTIVELY) BORINGS STB–1, STB–2 AND STB–3 ARE STRATIGRAPHIC BORINGS
- SEEP A 299.0 — WATER SEEP WITH ELEVATION SAMPLED FOR SURFACE WATER FOR LABORATORY ANALYSIS (MACTEC 2003: Seeps A through L, Manson Branch #2, and Seep #2)
- SEEP 252.9 — WATER SEEP WITH ELEVATION
- MB #14 — MANSON BRANCH SURFACE WATER SAMPLING LOCATION (MACTEC 2003: MB#14, MB#15, MB#16)
- STAFF GUAGE FOR MEASURING SURFACE WATER ELEVATION
- DYE INJECTION WELL
- kd–1 — SOIL BORING FOR SOIL SAMPLING FOR SOIL PARTITION COEFFICIENT (kd) STUDY
- BUSH
- BUSHLINE
- TREE
- TREELINE
- HEDGE
- STREAM
- FENCE
- 300 — TOPOGRAPHIC CONTOUR
- DI — DROP INLET
- LIGHT POLE
- PROPERTY BOUNDARY
- EXTENT OF HSRA DEFINED SITE
- THERMO KING PROPERTY BOUNDARY
- BUILDING FLOOR SLAB AND RIP–RAP BLANKET ARE ENGINEERING CONTROLS. THE BUILDING FLOOR SLAB IS AN EXPOSURE BARRIER TO UNDERLYING SUB–SLAB VOC–IMPACTED SOILS. THE RIP–RAP BLANKET (APPROXIMATELY 11,100 SQUARE FEET) TO PRECLUDE THE SURFACE EXPRESSION OF SEEP WATER WITH CONCENTRATIONS GREATER THAN IN–STREAM WATER QUALITY CRITERIA (ISWQC)

SOURCE: TOPOGRAPHIC AND PROPERTY BOUNDARY SURVEYS BY SURVEYING SOLUTIONS, INC., JULY 2002 AND HOFFMAN & COMPANY INC., USING FEBRUARY 2002 AERIAL PHOTOGRAPH AND GROUND SURVEYING. 2000 SAMPLING LOCATIONS SURVEYED BY McGILL & ASSOCIATES OCTOBER 2000. 2003 AND 2004 SAMPLING LOCATIONS SURVEYED BY MACTEC ENGINEERING AND CONSULTING, INC. IN SEPTEMBER 2003 AND DECEMBER 2004. LOCATIONS OF FORMER NORTH AND SOUTH SETTLING PONDS APPROXIMATED FROM HISTORICAL AERIAL PHOTOGRAPHS.

SCALE IN FEET
0 200 400

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DESIGNED	R. QUINN
DRAWN	T. GLADSTONE
CHECKED	R. QUINN
IN CHARGE	D. ALCOTT
DATE	12/7/2016

THERMO KING CORPORATION
LOUISVILLE, GEORGIA

AMEC FOSTER WHEELER
ENVIRONMENT & INFRASTRUCTURE, INC.
1075 BIG SHANTY ROAD, NW, SUITE 100
KENNESAW, GEORGIA 30144 (770) 421–3400

amec foster wheeler

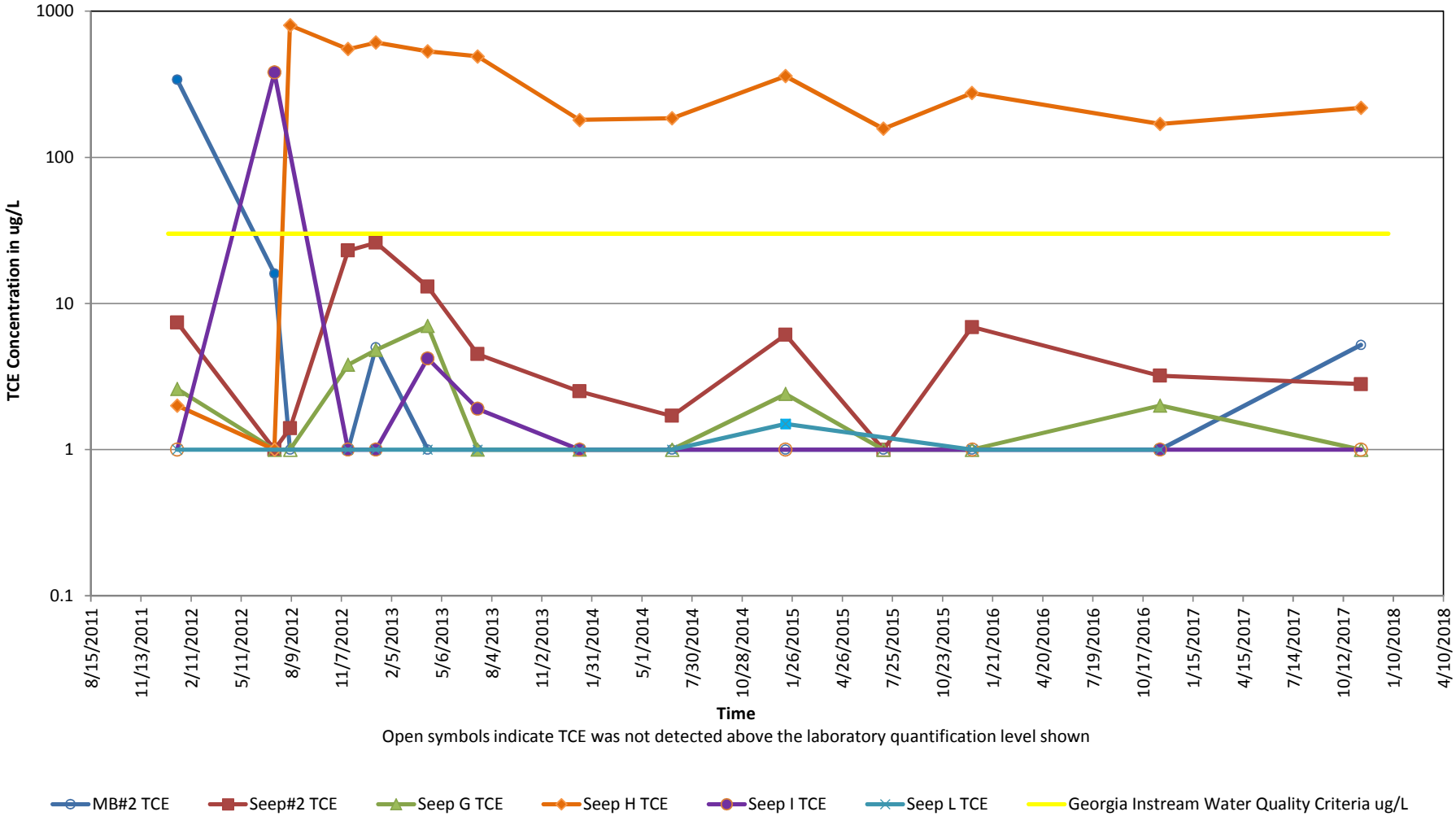
SITE PLAN

FIGURE: 1

SCALE	AS SHOWN
CONTRACT	6122–09–0322
DWG. NO.	
REV	
PAGE NO	

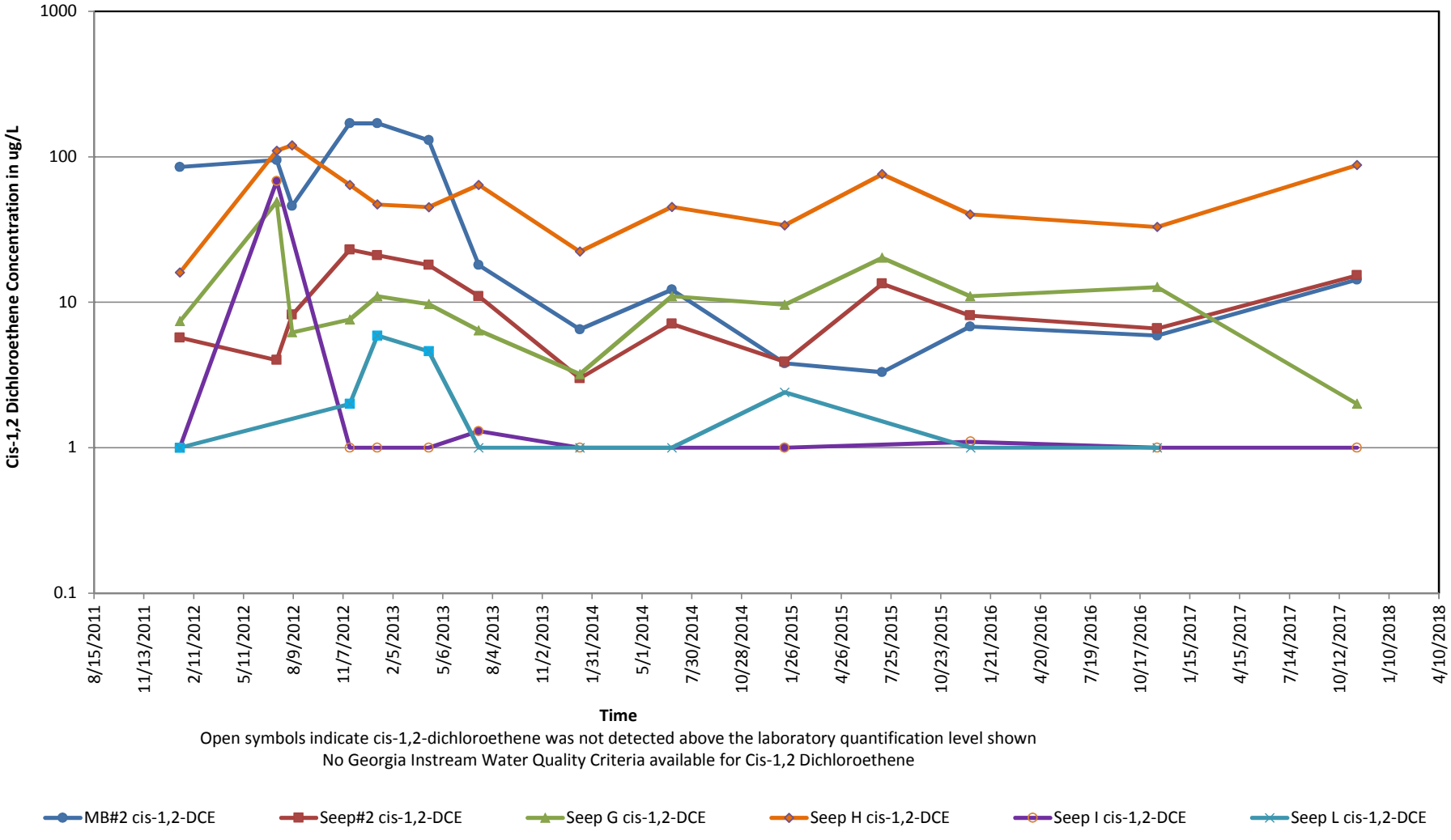
J:\Thermo King\OCT 2016\SITE PLAN_1.dwg – Layout1 12/15/2016 8:21am tonya.gladstone

Figure 2: Time Trend of TCE in Seeps (2012-2017)



Open symbols indicate TCE was not detected above the laboratory quantification level shown

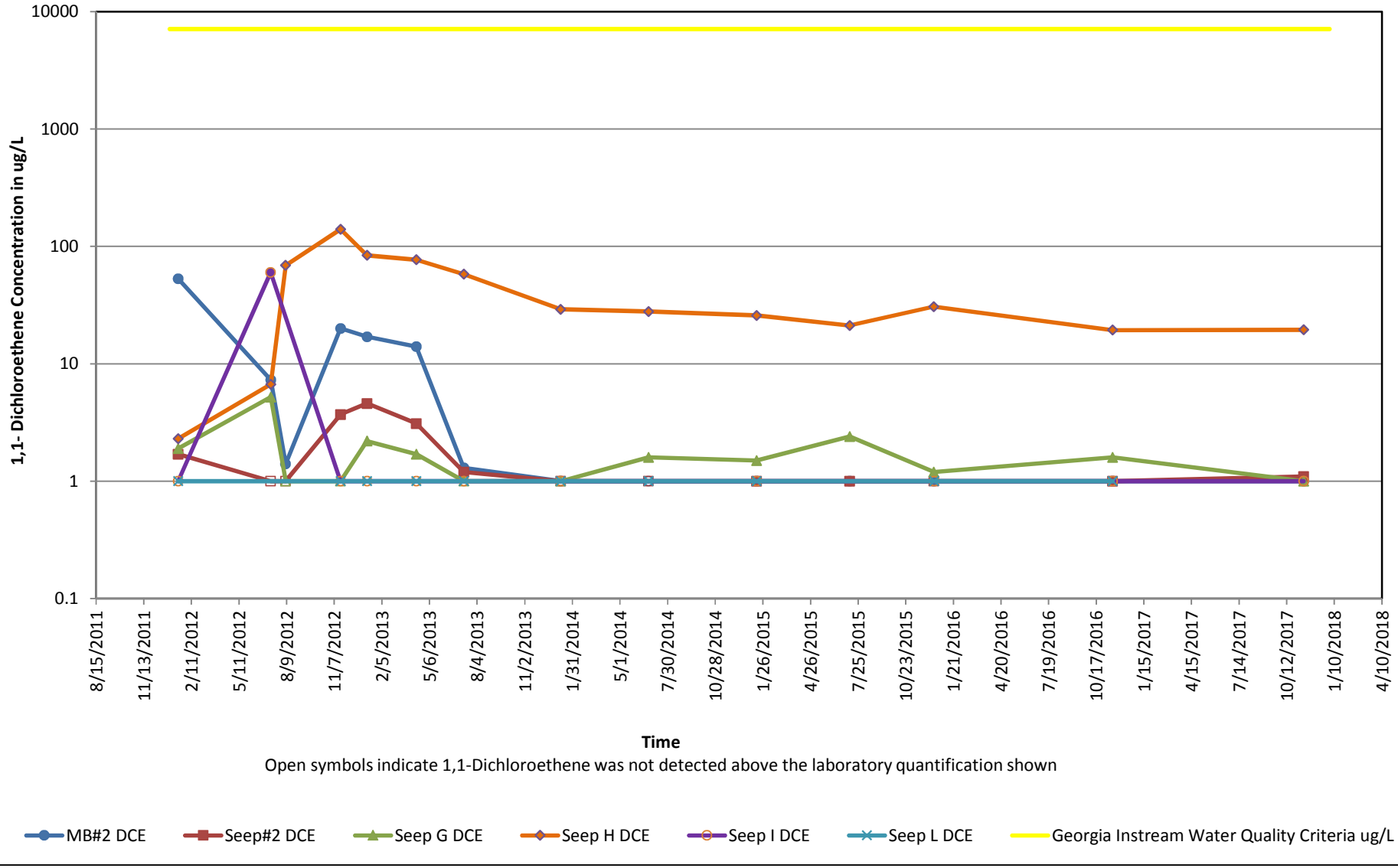
Figure 3: Time Trend of Cis-1,2-Dichloroethene in Seeps (2012-2017)



Open symbols indicate cis-1,2-dichloroethene was not detected above the laboratory quantification level shown

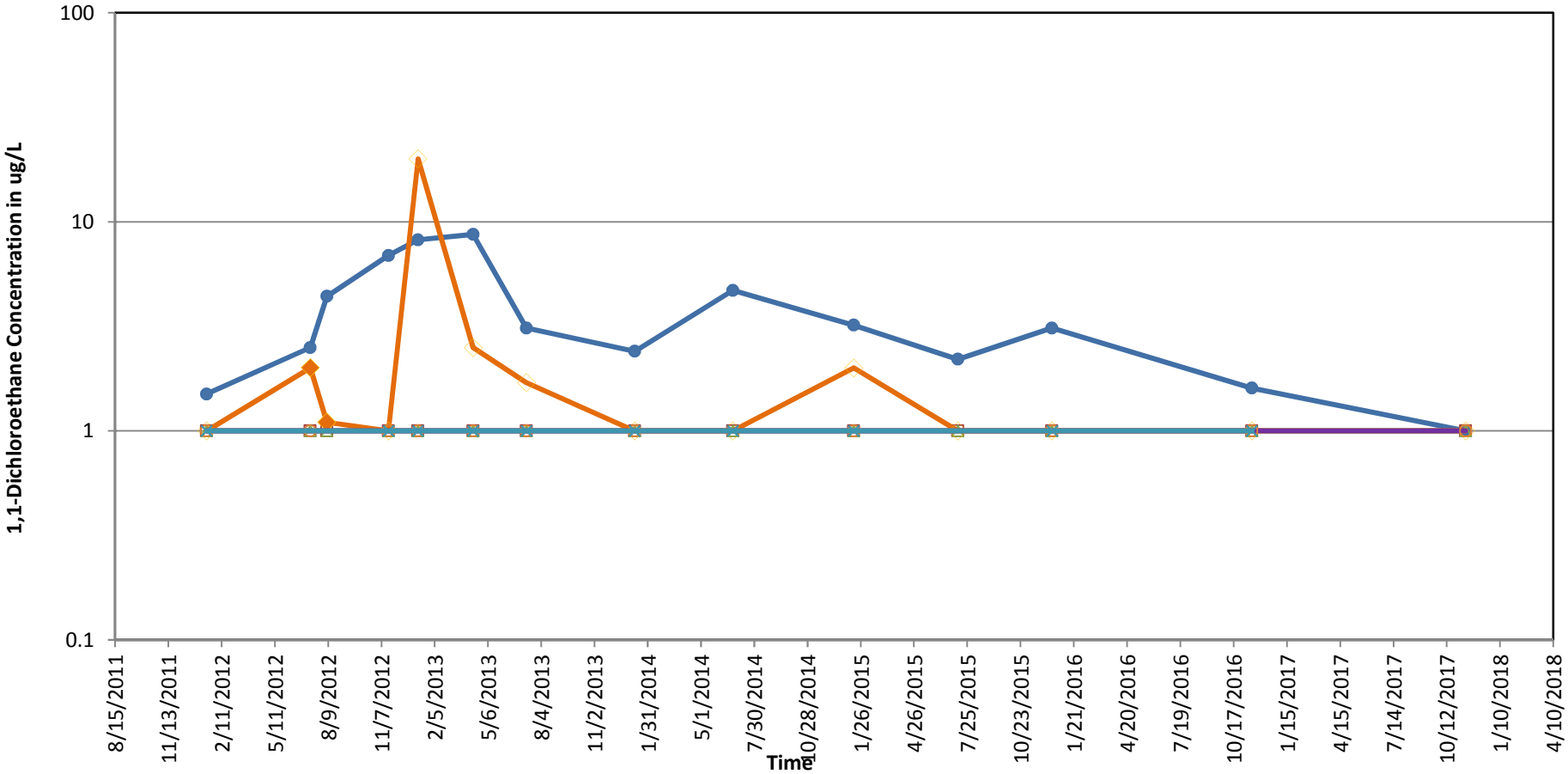
No Georgia Instream Water Quality Criteria available for Cis-1,2 Dichloroethene

Figure 4: Time Trend of 1,1-Dichloroethene in Seeps (2012-2017)



Open symbols indicate 1,1-Dichloroethene was not detected above the laboratory quantification shown

Figure 5: Time Trend of 1,1-Dichloroethane in Seeps (2012-2017)



Open symbols indicate DCA was not detected above the laboratory quantification level shown

No Georgia Instream Water Quality Criteria available for 1,1-Dichloroethane

Figure 6: Time Trend of Toluene in Seeps (2012-2017)

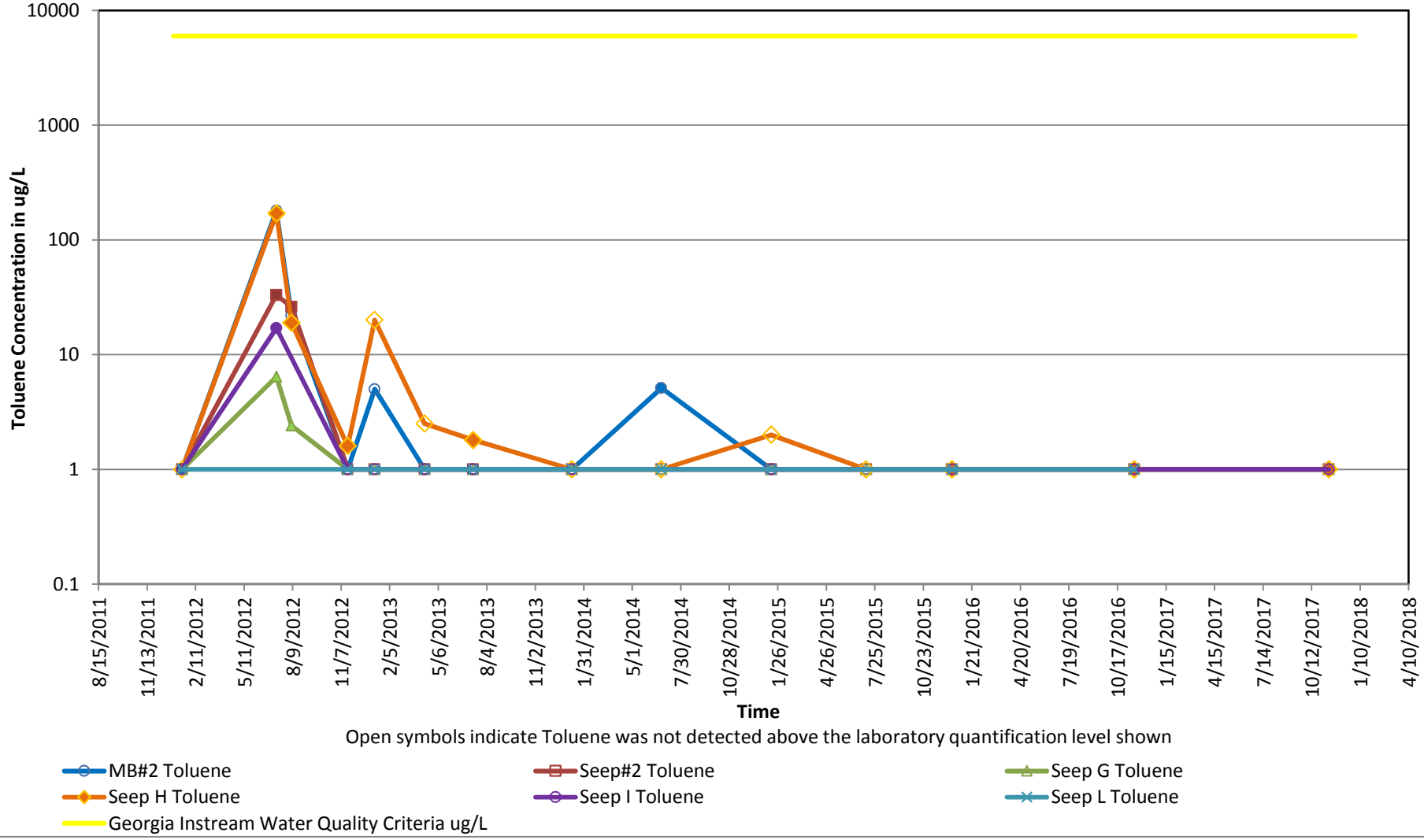
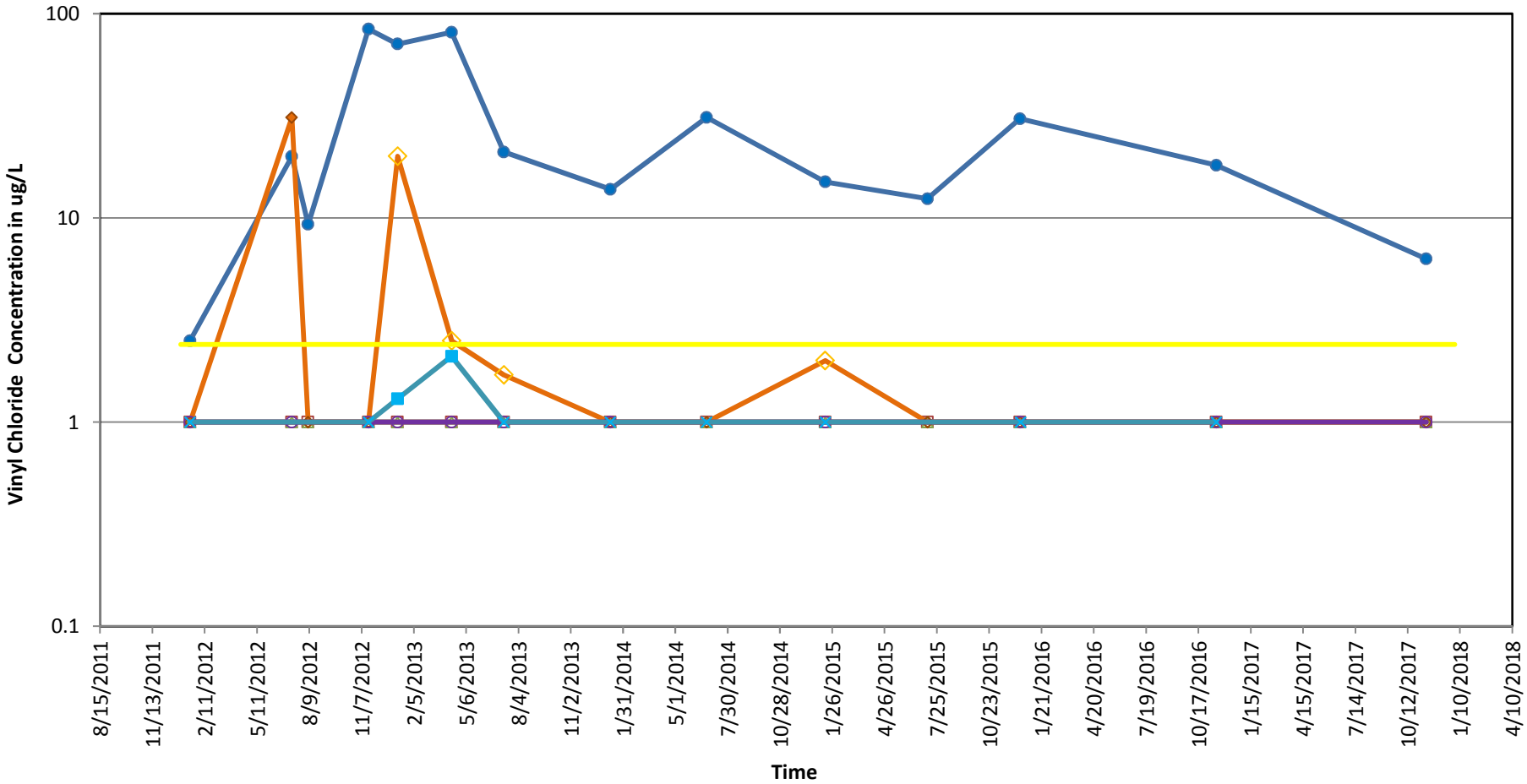


Figure 7: Time Trend of Vinyl Chloride in Seeps (2012-2017)



Open symbols indicate Vinyl Chloride was not detected above the laboratory quantification level shown

MB# 2 VC | Seep#2 VC | Seep G VC | Seep H VC | Seep I VC | Seep L VC | Georgia Instream Water Quality Criteria ug/L

APPENDIX A

LABORATORY REPORTS AND FIELD SAMPLING FORMS FOR NOVEMBER 2017 SEEP AND SURFACE WATER SAMPLING EVENT

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

November 27, 2017

Rhonda Quinn
Amec Foster Wheeler
1075 Big Shanty Rd
Suite 100
Kennesaw, GA 30144

RE: Project: TK LOUISVILLE
Pace Project No.: 92363480

Dear Rhonda Quinn:
Enclosed are the analytical results for sample(s) received by the laboratory on November 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

cc: Greg Wrenn, Amec Foster Wheeler

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CERTIFICATIONS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Charlotte Certification IDs

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

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Huntersville, NC 28078
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SAMPLE SUMMARY

Project: TK LOUISVILLE
Pace Project No.: 92363480

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92363480001	**MANSON BRANCH # 2**	Water	11/13/17 15:25	11/15/17 09:30
92363480002	**SEEP H**	Water	11/13/17 15:32	11/15/17 09:30
92363480003	**SEEP G**	Water	11/13/17 15:45	11/15/17 09:30
92363480004	**SEEP #2**	Water	11/13/17 15:55	11/15/17 09:30
92363480005	**SEEP I**	Water	11/13/17 16:05	11/15/17 09:30
92363480006	**DUP-1**	Water	11/13/17 12:00	11/15/17 09:30
92363480007	**MB #3**	Water	11/13/17 16:34	11/15/17 09:30
92363480008	**MB #5**	Water	11/13/17 16:56	11/15/17 09:30
92363480009	**MB #15**	Water	11/13/17 16:48	11/15/17 09:30
92363480010	**MB #16**	Water	11/13/17 16:18	11/15/17 09:30
92363480011	**TRIP BLANK**	Water	11/13/17 00:00	11/15/17 09:30

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SAMPLE ANALYTE COUNT

Project: TK LOUISVILLE
Pace Project No.: 92363480

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92363480001	**MANSON BRANCH # 2**	EPA 8260	GAW	60	PASI-C
92363480002	**SEEP H**	EPA 8260	GAW	60	PASI-C
92363480003	**SEEP G**	EPA 8260	GAW	60	PASI-C
92363480004	**SEEP #2**	EPA 8260	GAW	60	PASI-C
92363480005	**SEEP I**	EPA 8260	GAW	60	PASI-C
92363480006	**DUP-1**	EPA 8260	GAW	60	PASI-C
92363480007	**MB #3**	EPA 8260	GAW	60	PASI-C
92363480008	**MB #5**	EPA 8260	GAW	60	PASI-C
92363480009	**MB #15**	EPA 8260	GAW	60	PASI-C
92363480010	**MB #16**	EPA 8260	GAW	60	PASI-C
92363480011	**TRIP BLANK**	EPA 8260	GAW	60	PASI-C

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: TK LOUISVILLE
Pace Project No.: 92363480

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92363480001	**MANSON BRANCH # 2**					
EPA 8260	cis-1,2-Dichloroethene	14.3	ug/L	1.0	11/22/17 18:00	
EPA 8260	Trichloroethene	5.2	ug/L	1.0	11/22/17 18:00	
EPA 8260	Vinyl chloride	6.3	ug/L	1.0	11/22/17 18:00	
92363480002	**SEEP H**					
EPA 8260	Chloroform	1.5	ug/L	1.0	11/22/17 18:17	
EPA 8260	1,1-Dichloroethene	19.5	ug/L	1.0	11/22/17 18:17	
EPA 8260	cis-1,2-Dichloroethene	87.6	ug/L	1.0	11/22/17 18:17	
EPA 8260	Trichloroethene	218	ug/L	2.0	11/24/17 01:40	
92363480003	**SEEP G**					
EPA 8260	Chloromethane	1.7	ug/L	1.0	11/22/17 18:35	
EPA 8260	cis-1,2-Dichloroethene	2.0	ug/L	1.0	11/22/17 18:35	
92363480004	**SEEP #2**					
EPA 8260	1,1-Dichloroethene	1.1	ug/L	1.0	11/22/17 18:52	
EPA 8260	cis-1,2-Dichloroethene	15.3	ug/L	1.0	11/22/17 18:52	
EPA 8260	Trichloroethene	2.8	ug/L	1.0	11/22/17 18:52	
92363480006	**DUP-1**					
EPA 8260	Chloroform	1.6	ug/L	1.0	11/22/17 19:26	
EPA 8260	1,1-Dichloroethene	20.0	ug/L	1.0	11/22/17 19:26	
EPA 8260	cis-1,2-Dichloroethene	87.5	ug/L	1.0	11/22/17 19:26	
EPA 8260	Trichloroethene	220	ug/L	2.0	11/24/17 01:58	

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PROJECT NARRATIVE

Project: TK LOUISVILLE
Pace Project No.: 92363480

Method: **EPA 8260**
Description: 8260 MSV Low Level
Client: Amec Foster Wheeler, Georgia
Date: November 27, 2017

General Information:
11 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 388006

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92363682008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2152801)
  - 1,4-Dioxane (p-Dioxane)
  - 2,2-Dichloropropane

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MANSON BRANCH # 2 **Lab ID: 92363480001** Collected: 11/13/17 15:25 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 18:00	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 18:00	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 18:00	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:00	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 18:00	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:00	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 18:00	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 18:00	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:00	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:00	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 18:00	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 18:00	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 18:00	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:00	75-35-4	
cis-1,2-Dichloroethene	**14.3**	ug/L	1.0	1		11/22/17 18:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:00	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:00	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:00	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:00	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 18:00	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 18:00	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 18:00	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 18:00	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 18:00	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 18:00	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 18:00	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 18:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:00	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MANSON BRANCH # 2 **Lab ID: 92363480001** Collected: 11/13/17 15:25 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:00	79-00-5	
Trichloroethene	**5.2**	ug/L	1.0	1		11/22/17 18:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 18:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:00	108-67-8	
Vinyl chloride	**6.3**	ug/L	1.0	1		11/22/17 18:00	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:00	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:00	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 18:00	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		11/22/17 18:00	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/22/17 18:00	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP H **Lab ID: 92363480002** Collected: 11/13/17 15:32 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 18:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 18:17	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 18:17	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:17	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 18:17	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:17	75-00-3	
Chloroform	**1.5**	ug/L	1.0	1		11/22/17 18:17	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 18:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 18:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 18:17	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 18:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:17	107-06-2	
1,1-Dichloroethene	**19.5**	ug/L	1.0	1		11/22/17 18:17	75-35-4	
cis-1,2-Dichloroethene	**87.6**	ug/L	1.0	1		11/22/17 18:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:17	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 18:17	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 18:17	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 18:17	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 18:17	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 18:17	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 18:17	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 18:17	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 18:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:17	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP H **Lab ID: 92363480002** Collected: 11/13/17 15:32 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:17	79-00-5	
Trichloroethene	**218**	ug/L	2.0	2		11/24/17 01:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 18:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:17	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 18:17	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:17	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 18:17	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/22/17 18:17	17060-07-0	
Toluene-d8 (S)	96	%	70-130	1		11/22/17 18:17	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP G **Lab ID: 92363480003** Collected: 11/13/17 15:45 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 18:35	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 18:35	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 18:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:35	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 18:35	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:35	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 18:35	67-66-3	
Chloromethane	**1.7**	ug/L	1.0	1		11/22/17 18:35	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:35	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 18:35	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 18:35	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 18:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:35	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	1		11/22/17 18:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:35	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 18:35	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 18:35	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 18:35	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 18:35	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 18:35	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 18:35	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 18:35	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 18:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:35	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP G **Lab ID: 92363480003** Collected: 11/13/17 15:45 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 18:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 18:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:35	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 18:35	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:35	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:35	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	70-130	1		11/22/17 18:35	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		11/22/17 18:35	17060-07-0	
Toluene-d8 (S)	99	%	70-130	1		11/22/17 18:35	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP #2 **Lab ID: 92363480004** Collected: 11/13/17 15:55 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 18:52	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 18:52	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 18:52	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 18:52	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 18:52	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 18:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 18:52	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 18:52	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 18:52	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:52	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 18:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 18:52	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 18:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 18:52	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 18:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 18:52	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 18:52	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	1		11/22/17 18:52	75-35-4	
cis-1,2-Dichloroethene	**15.3**	ug/L	1.0	1		11/22/17 18:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 18:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:52	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:52	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 18:52	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 18:52	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 18:52	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 18:52	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 18:52	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 18:52	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 18:52	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 18:52	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 18:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 18:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 18:52	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 18:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 18:52	120-82-1	

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(704)875-9092

ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP #2 **Lab ID: 92363480004** Collected: 11/13/17 15:55 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 18:52	79-00-5	
Trichloroethene	**2.8**	ug/L	1.0	1		11/22/17 18:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 18:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 18:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 18:52	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 18:52	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 18:52	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 18:52	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 18:52	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		11/22/17 18:52	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		11/22/17 18:52	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP I **Lab ID: 92363480005** Collected: 11/13/17 16:05 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 19:09	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 19:09	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 19:09	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 19:09	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 19:09	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 19:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 19:09	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 19:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 19:09	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:09	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 19:09	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 19:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 19:09	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 19:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 19:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:09	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:09	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:09	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 19:09	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 19:09	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 19:09	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 19:09	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 19:09	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 19:09	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 19:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 19:09	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 19:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:09	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: SEEP I **Lab ID: 92363480005** Collected: 11/13/17 16:05 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 19:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 19:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 19:09	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:09	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 19:09	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 19:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 19:09	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	70-130	1		11/22/17 19:09	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		11/22/17 19:09	17060-07-0	
Toluene-d8 (S)	97	%	70-130	1		11/22/17 19:09	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: DUP-1 **Lab ID: 92363480006** Collected: 11/13/17 12:00 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 19:26	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 19:26	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 19:26	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 19:26	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 19:26	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 19:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 19:26	75-00-3	
Chloroform	**1.6**	ug/L	1.0	1		11/22/17 19:26	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 19:26	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:26	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 19:26	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 19:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 19:26	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 19:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 19:26	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:26	107-06-2	
1,1-Dichloroethene	**20.0**	ug/L	1.0	1		11/22/17 19:26	75-35-4	
cis-1,2-Dichloroethene	**87.5**	ug/L	1.0	1		11/22/17 19:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:26	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:26	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:26	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:26	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 19:26	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 19:26	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 19:26	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 19:26	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 19:26	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 19:26	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 19:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 19:26	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 19:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:26	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: DUP-1 **Lab ID: 92363480006** Collected: 11/13/17 12:00 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:26	79-00-5	
Trichloroethene	**220**	ug/L	2.0	2		11/24/17 01:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 19:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 19:26	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:26	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 19:26	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 19:26	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 19:26	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 19:26	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/22/17 19:26	17060-07-0	
Toluene-d8 (S)	95	%	70-130	1		11/22/17 19:26	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #3 **Lab ID: 92363480007** Collected: 11/13/17 16:34 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 19:44	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 19:44	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 19:44	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 19:44	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 19:44	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 19:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 19:44	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 19:44	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 19:44	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:44	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 19:44	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 19:44	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 19:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 19:44	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 19:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 19:44	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 19:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 19:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:44	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 19:44	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 19:44	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 19:44	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 19:44	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 19:44	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 19:44	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 19:44	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 19:44	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 19:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 19:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 19:44	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 19:44	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 19:44	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #3 **Lab ID: 92363480007** Collected: 11/13/17 16:34 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 19:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 19:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 19:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 19:44	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 19:44	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 19:44	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 19:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 19:44	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	95	%	70-130	1		11/22/17 19:44	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/22/17 19:44	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/22/17 19:44	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #5 **Lab ID: 92363480008** Collected: 11/13/17 16:56 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 20:01	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 20:01	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 20:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:01	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 20:01	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:01	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:01	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:01	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 20:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 20:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 20:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:01	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 20:01	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 20:01	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 20:01	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 20:01	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 20:01	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 20:01	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:01	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:01	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #5 **Lab ID: 92363480008** Collected: 11/13/17 16:56 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:01	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:01	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:01	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:01	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:01	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 20:01	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		11/22/17 20:01	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		11/22/17 20:01	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #15 **Lab ID: 92363480009** Collected: 11/13/17 16:48 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 20:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 20:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 20:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:18	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 20:18	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:18	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:18	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 20:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 20:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 20:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:18	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 20:18	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 20:18	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 20:18	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 20:18	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 20:18	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 20:18	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:18	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:18	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #15 **Lab ID: 92363480009** Collected: 11/13/17 16:48 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:18	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:18	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:18	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	94	%	70-130	1		11/22/17 20:18	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130	1		11/22/17 20:18	17060-07-0	
Toluene-d8 (S)	95	%	70-130	1		11/22/17 20:18	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #16 **Lab ID: 92363480010** Collected: 11/13/17 16:18 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 20:36	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 20:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 20:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 20:36	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 20:36	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 20:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 20:36	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 20:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 20:36	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:36	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 20:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 20:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 20:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 20:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 20:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 20:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 20:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 20:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 20:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 20:36	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 20:36	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 20:36	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 20:36	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 20:36	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 20:36	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 20:36	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 20:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 20:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 20:36	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 20:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 20:36	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: MB #16 **Lab ID: 92363480010** Collected: 11/13/17 16:18 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 20:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 20:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 20:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 20:36	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 20:36	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 20:36	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 20:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 20:36	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	97	%	70-130	1		11/22/17 20:36	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130	1		11/22/17 20:36	17060-07-0	
Toluene-d8 (S)	98	%	70-130	1		11/22/17 20:36	2037-26-5	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: TRIP BLANK **Lab ID: 92363480011** Collected: 11/13/17 00:00 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/22/17 17:08	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		11/22/17 17:08	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		11/22/17 17:08	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		11/22/17 17:08	75-27-4	
Bromomethane	ND	ug/L	2.0	1		11/22/17 17:08	74-83-9	
n-Butylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	98-06-6	
Carbon tetrachloride	ND	ug/L	1.0	1		11/22/17 17:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	108-90-7	
Chloroethane	ND	ug/L	1.0	1		11/22/17 17:08	75-00-3	
Chloroform	ND	ug/L	1.0	1		11/22/17 17:08	67-66-3	
Chloromethane	ND	ug/L	1.0	1		11/22/17 17:08	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 17:08	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		11/22/17 17:08	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	1		11/22/17 17:08	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		11/22/17 17:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		11/22/17 17:08	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		11/22/17 17:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		11/22/17 17:08	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		11/22/17 17:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		11/22/17 17:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		11/22/17 17:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 17:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		11/22/17 17:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 17:08	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		11/22/17 17:08	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		11/22/17 17:08	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		11/22/17 17:08	563-58-6	
1,4-Dioxane (p-Dioxane)	ND	ug/L	150	1		11/22/17 17:08	123-91-1	
Ethylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		11/22/17 17:08	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		11/22/17 17:08	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		11/22/17 17:08	99-87-6	
Methylene Chloride	ND	ug/L	2.0	1		11/22/17 17:08	75-09-2	
Naphthalene	ND	ug/L	1.0	1		11/22/17 17:08	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	103-65-1	
Styrene	ND	ug/L	1.0	1		11/22/17 17:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 17:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		11/22/17 17:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		11/22/17 17:08	127-18-4	
Toluene	ND	ug/L	1.0	1		11/22/17 17:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		11/22/17 17:08	120-82-1	

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ANALYTICAL RESULTS

Project: TK LOUISVILLE
Pace Project No.: 92363480

Sample: TRIP BLANK **Lab ID: 92363480011** Collected: 11/13/17 00:00 Received: 11/15/17 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260							
1,1,1-Trichloroethane	ND	ug/L	1.0	1		11/22/17 17:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		11/22/17 17:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		11/22/17 17:08	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		11/22/17 17:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		11/22/17 17:08	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		11/22/17 17:08	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		11/22/17 17:08	75-01-4	
m&p-Xylene	ND	ug/L	2.0	1		11/22/17 17:08	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		11/22/17 17:08	95-47-6	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1		11/22/17 17:08	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		11/22/17 17:08	17060-07-0	
Toluene-d8 (S)	100	%	70-130	1		11/22/17 17:08	2037-26-5	

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QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

QC Batch: 388006 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 92363480001, 92363480002, 92363480003, 92363480004, 92363480005, 92363480006, 92363480007, 92363480008, 92363480009, 92363480010, 92363480011

METHOD BLANK: 2152798 Matrix: Water
Associated Lab Samples: 92363480001, 92363480002, 92363480003, 92363480004, 92363480005, 92363480006, 92363480007, 92363480008, 92363480009, 92363480010, 92363480011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,1,1-Trichloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,1-Dichloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,1-Dichloroethene	ug/L	ND	1.0	11/22/17 15:59	
1,1-Dichloropropene	ug/L	ND	1.0	11/22/17 15:59	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
1,2,3-Trichloropropane	ug/L	ND	1.0	11/22/17 15:59	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	11/22/17 15:59	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	11/22/17 15:59	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	11/22/17 15:59	
1,2-Dichlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
1,2-Dichloroethane	ug/L	ND	1.0	11/22/17 15:59	
1,2-Dichloropropane	ug/L	ND	1.0	11/22/17 15:59	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	11/22/17 15:59	
1,3-Dichlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
1,3-Dichloropropane	ug/L	ND	1.0	11/22/17 15:59	
1,4-Dichlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
1,4-Dioxane (p-Dioxane)	ug/L	ND	150	11/22/17 15:59	
2,2-Dichloropropane	ug/L	ND	1.0	11/22/17 15:59	
2-Chlorotoluene	ug/L	ND	1.0	11/22/17 15:59	
4-Chlorotoluene	ug/L	ND	1.0	11/22/17 15:59	
Benzene	ug/L	ND	1.0	11/22/17 15:59	
Bromobenzene	ug/L	ND	1.0	11/22/17 15:59	
Bromochloromethane	ug/L	ND	1.0	11/22/17 15:59	
Bromodichloromethane	ug/L	ND	1.0	11/22/17 15:59	
Bromomethane	ug/L	ND	2.0	11/22/17 15:59	
Carbon tetrachloride	ug/L	ND	1.0	11/22/17 15:59	
Chlorobenzene	ug/L	ND	1.0	11/22/17 15:59	
Chloroethane	ug/L	ND	1.0	11/22/17 15:59	
Chloroform	ug/L	ND	1.0	11/22/17 15:59	
Chloromethane	ug/L	ND	1.0	11/22/17 15:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	11/22/17 15:59	
Dibromochloromethane	ug/L	ND	1.0	11/22/17 15:59	
Dibromomethane	ug/L	ND	1.0	11/22/17 15:59	
Dichlorodifluoromethane	ug/L	ND	1.0	11/22/17 15:59	
Ethylbenzene	ug/L	ND	1.0	11/22/17 15:59	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	11/22/17 15:59	

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QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

METHOD BLANK: 2152798 Matrix: Water

Associated Lab Samples: 92363480001, 92363480002, 92363480003, 92363480004, 92363480005, 92363480006, 92363480007, 92363480008, 92363480009, 92363480010, 92363480011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isopropylbenzene (Cumene)	ug/L	ND	1.0	11/22/17 15:59	
m&p-Xylene	ug/L	ND	2.0	11/22/17 15:59	
Methylene Chloride	ug/L	ND	2.0	11/22/17 15:59	
n-Butylbenzene	ug/L	ND	1.0	11/22/17 15:59	
n-Propylbenzene	ug/L	ND	1.0	11/22/17 15:59	
Naphthalene	ug/L	ND	1.0	11/22/17 15:59	
o-Xylene	ug/L	ND	1.0	11/22/17 15:59	
p-Isopropyltoluene	ug/L	ND	1.0	11/22/17 15:59	
sec-Butylbenzene	ug/L	ND	1.0	11/22/17 15:59	
Styrene	ug/L	ND	1.0	11/22/17 15:59	
tert-Butylbenzene	ug/L	ND	1.0	11/22/17 15:59	
Tetrachloroethene	ug/L	ND	1.0	11/22/17 15:59	
Toluene	ug/L	ND	1.0	11/22/17 15:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	11/22/17 15:59	
Trichloroethene	ug/L	ND	1.0	11/22/17 15:59	
Trichlorofluoromethane	ug/L	ND	1.0	11/22/17 15:59	
Vinyl chloride	ug/L	ND	1.0	11/22/17 15:59	
1,2-Dichloroethane-d4 (S)	%	107	70-130	11/22/17 15:59	
4-Bromofluorobenzene (S)	%	94	70-130	11/22/17 15:59	
Toluene-d8 (S)	%	99	70-130	11/22/17 15:59	

LABORATORY CONTROL SAMPLE: 2152799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.7	103	70-130	
1,1,1-Trichloroethane	ug/L	50	51.5	103	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.9	96	70-130	
1,1,2-Trichloroethane	ug/L	50	50.9	102	70-130	
1,1-Dichloroethane	ug/L	50	53.7	107	70-130	
1,1-Dichloroethene	ug/L	50	55.0	110	70-132	
1,1-Dichloropropene	ug/L	50	50.8	102	70-130	
1,2,3-Trichlorobenzene	ug/L	50	51.4	103	70-135	
1,2,3-Trichloropropane	ug/L	50	47.9	96	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.6	107	70-134	
1,2,4-Trimethylbenzene	ug/L	50	51.8	104	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	49.1	98	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	51.8	104	70-130	
1,2-Dichlorobenzene	ug/L	50	51.4	103	70-130	
1,2-Dichloroethane	ug/L	50	49.3	99	70-130	
1,2-Dichloropropane	ug/L	50	52.0	104	70-130	
1,3,5-Trimethylbenzene	ug/L	50	52.4	105	70-130	
1,3-Dichlorobenzene	ug/L	50	51.7	103	70-130	
1,3-Dichloropropane	ug/L	50	52.6	105	70-130	

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QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

LABORATORY CONTROL SAMPLE: 2152799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.9	102	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	1000	1130	113	71-125	
2,2-Dichloropropane	ug/L	50	52.0	104	58-145	
2-Chlorotoluene	ug/L	50	51.5	103	70-130	
4-Chlorotoluene	ug/L	50	51.7	103	70-130	
Benzene	ug/L	50	50.2	100	70-130	
Bromobenzene	ug/L	50	53.6	107	70-130	
Bromochloromethane	ug/L	50	53.4	107	70-130	
Bromodichloromethane	ug/L	50	50.2	100	70-130	
Bromomethane	ug/L	50	50.3	101	54-130	
Carbon tetrachloride	ug/L	50	49.9	100	70-132	
Chlorobenzene	ug/L	50	51.7	103	70-130	
Chloroethane	ug/L	50	49.1	98	64-134	
Chloroform	ug/L	50	51.2	102	70-130	
Chloromethane	ug/L	50	51.6	103	64-130	
cis-1,2-Dichloroethene	ug/L	50	55.4	111	70-131	
Dibromochloromethane	ug/L	50	49.3	99	70-130	
Dibromomethane	ug/L	50	50.5	101	70-131	
Dichlorodifluoromethane	ug/L	50	40.9	82	56-130	
Ethylbenzene	ug/L	50	51.5	103	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.8	106	70-130	
Isopropylbenzene (Cumene)	ug/L	50	51.1	102	70-130	
m&p-Xylene	ug/L	100	102	102	70-130	
Methylene Chloride	ug/L	50	55.4	111	63-130	
n-Butylbenzene	ug/L	50	51.7	103	70-130	
n-Propylbenzene	ug/L	50	52.5	105	70-130	
Naphthalene	ug/L	50	51.4	103	70-138	
o-Xylene	ug/L	50	51.1	102	70-130	
p-Isopropyltoluene	ug/L	50	51.8	104	70-130	
sec-Butylbenzene	ug/L	50	50.7	101	70-130	
Styrene	ug/L	50	51.3	103	70-130	
tert-Butylbenzene	ug/L	50	42.9	86	70-130	
Tetrachloroethene	ug/L	50	52.4	105	70-130	
Toluene	ug/L	50	50.6	101	70-130	
trans-1,2-Dichloroethene	ug/L	50	54.9	110	70-130	
Trichloroethene	ug/L	50	50.6	101	70-130	
Trichlorofluoromethane	ug/L	50	49.9	100	62-133	
Vinyl chloride	ug/L	50	52.0	104	50-150	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			94	70-130	
Toluene-d8 (S)	%			98	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

MATRIX SPIKE SAMPLE: 2152801

Parameter	Units	92363682008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.3	106	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	23.3	117	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.6	103	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	22.2	111	70-130	
1,1-Dichloroethane	ug/L	ND	20	23.8	119	70-130	
1,1-Dichloroethene	ug/L	ND	20	24.8	124	70-166	
1,1-Dichloropropene	ug/L	ND	20	22.5	112	70-130	
1,2,3-Trichlorobenzene	ug/L	ND	20	21.9	109	70-130	
1,2,3-Trichloropropane	ug/L	ND	20	20.8	104	70-130	
1,2,4-Trichlorobenzene	ug/L	ND	20	22.3	112	70-130	
1,2,4-Trimethylbenzene	ug/L	ND	20	21.7	108	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	22.0	110	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	21.7	109	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	21.6	108	70-130	
1,2-Dichloroethane	ug/L	ND	20	20.9	104	70-130	
1,2-Dichloropropane	ug/L	ND	20	22.9	114	70-130	
1,3,5-Trimethylbenzene	ug/L	ND	20	22.3	111	70-130	
1,3-Dichlorobenzene	ug/L	ND	20	21.5	107	70-130	
1,3-Dichloropropane	ug/L	ND	20	22.2	111	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	21.3	106	70-130	
1,4-Dioxane (p-Dioxane)	ug/L	ND	400	601	150	70-130	M1
2,2-Dichloropropane	ug/L	ND	20	13.0	65	70-130	M1
2-Chlorotoluene	ug/L	ND	20	22.1	110	70-130	
4-Chlorotoluene	ug/L	ND	20	21.8	109	70-130	
Benzene	ug/L	ND	20	21.7	109	70-148	
Bromobenzene	ug/L	ND	20	22.6	113	70-130	
Bromochloromethane	ug/L	ND	20	22.8	114	70-130	
Bromodichloromethane	ug/L	ND	20	21.3	107	70-130	
Bromomethane	ug/L	ND	20	21.3	106	70-130	
Carbon tetrachloride	ug/L	ND	20	21.9	109	70-130	
Chlorobenzene	ug/L	ND	20	21.8	109	70-146	
Chloroethane	ug/L	ND	20	23.2	116	70-130	
Chloroform	ug/L	ND	20	22.5	113	70-130	
Chloromethane	ug/L	ND	20	24.3	122	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	24.3	122	70-130	
Dibromochloromethane	ug/L	ND	20	19.9	100	70-130	
Dibromomethane	ug/L	ND	20	22.0	110	70-130	
Dichlorodifluoromethane	ug/L	ND	20	18.1	91	70-130	
Ethylbenzene	ug/L	ND	20	21.7	109	70-130	
Hexachloro-1,3-butadiene	ug/L	ND	20	19.9	100	70-130	
Isopropylbenzene (Cumene)	ug/L	ND	20	21.7	109	70-130	
m&p-Xylene	ug/L	ND	40	43.5	109	70-130	
Methylene Chloride	ug/L	ND	20	22.3	111	70-130	
n-Butylbenzene	ug/L	ND	20	20.5	103	70-130	
n-Propylbenzene	ug/L	ND	20	22.4	112	70-130	
Naphthalene	ug/L	ND	20	22.5	112	70-130	
o-Xylene	ug/L	ND	20	21.5	107	70-130	

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

MATRIX SPIKE SAMPLE: 2152801

Parameter	Units	92363682008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
p-Isopropyltoluene	ug/L	ND	20	21.8	109	70-130	
sec-Butylbenzene	ug/L	ND	20	22.1	111	70-130	
Styrene	ug/L	ND	20	14.5	72	70-130	
tert-Butylbenzene	ug/L	ND	20	18.6	93	70-130	
Tetrachloroethene	ug/L	ND	20	21.7	109	70-130	
Toluene	ug/L	ND	20	22.0	110	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	24.1	121	70-130	
Trichloroethene	ug/L	ND	20	22.2	111	69-151	
Trichlorofluoromethane	ug/L	ND	20	22.6	113	70-130	
Vinyl chloride	ug/L	ND	20	24.7	123	70-130	
1,2-Dichloroethane-d4 (S)	%				98	70-130	
4-Bromofluorobenzene (S)	%				94	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 2152800

Parameter	Units	92363682007 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	
1,4-Dichlorobenzene	ug/L	ND	ND		30	
1,4-Dioxane (p-Dioxane)	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: TK LOUISVILLE
Pace Project No.: 92363480

SAMPLE DUPLICATE: 2152800

Parameter	Units	92363682007 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromomethane	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	103	104	1		
4-Bromofluorobenzene (S)	%	92	95	3		
Toluene-d8 (S)	%	94	96	2		

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(704)875-9092

QUALIFIERS

Project: TK LOUISVILLE
Pace Project No.: 92363480

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TK LOUISVILLE
Pace Project No.: 92363480

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92363480001	**MANSON BRANCH # 2**	EPA 8260	388006		
92363480002	**SEEP H**	EPA 8260	388006		
92363480003	**SEEP G**	EPA 8260	388006		
92363480004	**SEEP #2**	EPA 8260	388006		
92363480005	**SEEP I**	EPA 8260	388006		
92363480006	**DUP-1**	EPA 8260	388006		
92363480007	**MB #3**	EPA 8260	388006		
92363480008	**MB #5**	EPA 8260	388006		
92363480009	**MB #15**	EPA 8260	388006		
92363480010	**MB #16**	EPA 8260	388006		
92363480011	**TRIP BLANK**	EPA 8260	388006		

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Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: August 4, 2017 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.04	Issuing Authority: Pace Quality Office

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

Sample Condition Upon Receipt

Client Name: AMEC

Project #

WO# : 92363480

92363480

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

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

Date/Initials Person Examining Contents: MC 11/15/17

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

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

Thermometer: ☐ IR Gun ID: 1701

Type of Ice: ☑ Wet ☐ Blue ☐ None

Correction Factor: Cooler Temp Corrected (°C): 5.1

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

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

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

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

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Sample Discrepancy: _____

Lot ID of split containers: _____

Project Manager SCURF Review: _____ **Date:** 11/16

Project Manager SRF Review: _____ **Date:** 11/16

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

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

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

Project #

WO#: 92363480

PM: PTE Due Date: 11/22/17

CLIENT: 92-AMEC GA

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

pH Adjustment Log for Preserved Samples

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	~~AMEC~~ Wood.	Report To:	Quinn, Rhonda	Attention:	
Address:	1075 Big Shanty Rd	Copy To:		Company Name:	
	Suite 100, Kennesaw, GA 30144			Address:	
Email:	Rhonda.Quinn@woodplc.com	Purchase Order #:		Pace Quote:	
Phone:	770-421-3400 Fax:	Project Name:	TK Louisville	Pace Project Manager:	taylor.ezell@pacelabs.com,
Requested Due Date:	Standard TAT	Project #:		Pace Profile #:	6445-1

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Trip BLANK	8260+1,4-Dioxane	Residual Chlorine (Y/N)	8260 348D
1	Manson Branch #2	WT	G			11-13-17	1525		3				X							X		001
2	Seep H	WT	G			11-13-17	1532		3				X							X		002
3	Seep G	WT	G			11-13-17	1545		3				X							X		003
4	Seep #2	WT	G			11-13-17	1555		3				X							X		004
5	Seep I	WT	G			11-13-17	1605		3				X							X		005
6	DUP-1	WT	G			11-13-17	12:00		3				X							X		006
7	MB #3	WT	G			11-13-17	1634		3				X							X		007
8	MB #5	WT	G			11-13-17	1656		3				X							X		008
9	MB #15	WT	G			11-13-17	1648		3				X							X		009
10	MB #16	WT	G			11-13-17	1618		3				X							X		010
11	Trip Blank	WT	G						2										X	X		011
12																						

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
SITE LIST (VOCs) INCLUDED -	WOOD	11-14-17	1930	Pace	11-15	9:30

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: EVER GUILLEN

SIGNATURE of SAMPLER:

DATE Signed: 11-14-17

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep #2 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1555

SAMPLE METHOD: Fill bottle from seep water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1550 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1555		5.52	14.1	.03	43.8	( )	
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER: Evan G		OBSERVER: Mark A.	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep Manson Branch #2 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1525

SAMPLE METHOD: Fill bottle from seep water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1520 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1525		5.68	14.7	0.1	77.3	NA ( )	NA
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear Cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	Evar G	OBSERVER:	Mark A.

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep B DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME:_____

SAMPLE METHOD: Fill bottle from seep water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1558 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1558	seep B DRY, No Sample collected at this location						
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	FedEX
SHIPPED TO:	Pace Analytical-Huntersville, NC
SAMPLER:	OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep G | DEPTH TO PRODUCT: | DATE: 7-13-17

PURGE METHOD: NA | TIME: 1545

SAMPLE METHOD: Fill bottle from seep water | GRAB (x) COMPOSITE ( )

DUP./REP. OF: | DEPTH TO WATER: | DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: | ____

Arrived at: 1543 | PURGE VOLUME: | WELL DIAMETER (inches): NA

Initial PID = ____

Bailing PID = ____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1545		4.84	14.9	.03	>1000	NA ( )	NA
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	Ever G	OBSERVER:	Mark A

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep H DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1532

SAMPLE METHOD: Fill bottle from seep water GRAB (x) COMPOSITE ( )

DUP./REP. OF: DUP-1 DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1530 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1532		4.83	15.5	.05	7.13	( )	

COMMENTS: DUP-1 collected at this location (1200)

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny clear Cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	EVPS &	OBSERVER:	Mark A

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep I | DEPTH TO PRODUCT: | DATE: 11-13-17

PURGE METHOD: NA | TIME: 1605

SAMPLE METHOD: Fill bottle from seep water | GRAB (x) COMPOSITE ( )

DUP./REP. OF: | DEPTH TO WATER: | DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: | _____

Arrived at: 1603 | PURGE VOLUME: | WELL DIAMETER (inches): NA

Initial PID = _____

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1605		5.9	14.7	.05	372	NA ( )	NA

COMMENTS:

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny clear cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	Evor G	OBSERVER:	Mark A

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: Seep L | DEPTH TO PRODUCT: | DATE: 11-13-17

PURGE METHOD: NA | TIME:

SAMPLE METHOD: Fill bottle from seep water | GRAB (x) COMPOSITE ( )

DUP./REP. OF: | DEPTH TO WATER: | DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH: |

Arrived at: 1610 | PURGE VOLUME: | WELL DIAMETER (inches): NA

Initial PID =

Bailing PID = | [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1610	SEEP L	Dry	; NO Sample Collected			( )	
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	FedEX
SHIPPED TO:	Pace Analytical-Huntersville, NC
SAMPLER:	OBSERVER:

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: **Surface Water** MB #3 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1634

SAMPLE METHOD: Fill bottle from surface water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1630 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1634		5.99	14.6	.08	36.1	NA ( )	NA
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear Cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	Elmer G	OBSERVER:	Mark A.

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: **Surface Water** MB#5 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1656

SAMPLE METHOD: Fill bottle from surface water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1650 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1656		6.31	14.4	.07	6.75	NA ( )	NM
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear Cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER: Evor G		OBSERVER: Mark A	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: **Surface Water** MB#15 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1648

SAMPLE METHOD: Fill bottle from surface water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1644 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1648		6.26	14.6	.08	6.52	NA ( )	NA
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION			
WEATHER:	Sunny Clear Cool		
SHIPPED VIA:	FedEX		
SHIPPED TO:	Pace Analytical-Huntersville, NC		
SAMPLER:	Elvis G	OBSERVER:	Mark H

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

TK LOUISVILLE FIELD SAMPLING REPORT

PROJECT NO: 6122-09-0322

AMEC Foster Wheeler Environment & Infrastructure, Inc.
1075 BIG SHANTY ROAD SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

WELL ID: **Surface Water** MB #16 DEPTH TO PRODUCT:_____ DATE: 11-13-17

PURGE METHOD: NA TIME: 1618

SAMPLE METHOD: Fill bottle from surface water GRAB (x) COMPOSITE ( )

DUP./REP. OF:_____ DEPTH TO WATER:_____ DEPTH TO PASSIVE DIFFUSION BAG (btoc)

TOTAL DEPTH:_____ _____

Arrived at: 1615 PURGE VOLUME:_____ WELL DIAMETER (inches):

Initial PID = _____ NA

Bailing PID = _____ [HAND AUGER WELL]

TIME	VOL. PURGED (gal)	pH	TEMPERATURE (°C)	SPEC. COND. (mS/cm)	TURB. (NTU)	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1618		5.5	14.5	.07	71000	NA ( )	NA
COMMENTS:							

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
40 mL	3	HCL to pH<2	8260B	site-specific Volatiles +1,4 dioxane

GENERAL INFORMATION		
WEATHER:	Sunny Clear Cool	
SHIPPED VIA:	FedEX	
SHIPPED TO:	Pace Analytical-Huntersville, NC	
SAMPLER: Evar G	OBSERVER: Mark A.	

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

APPENDIX B

INSPECTION CHECKLISTS FOR RIP-RAP BLANKET AND BUILDING FLOOR SLAB

Floor Slab Inspection Checklist (FSIC) – Thermo King, Louisville, Georgia

Condition	Yes	No	Description
1. Are there any cracks in the surface of the concrete greater than 1/8" in width that would allow direct contact with the soil?		✓	
a. Crack location:			
b. Crack length:			
c. Crack width:			
2. Are there any signs of settlement?	✓		
a. Location of settlement:			between M3 & M3 48" x 6"
b. Severity of settlement:			minor
3. Is there any floor/wall separation on interior or exterior walls?			NA to outside walls in Area
a. Location of separation:			
b. Separation width:			
4. Is there any ponding of water?		✓	
a. Location:			
b. Size (Diameter):			
5. Are expansion joints sealed?	✓		
a. Location:			
b. Condition of sealing material:			
6. Are there areas where concrete has been repaired/replaced?		✓	
a. Location:			
7. Are there any areas of discoloration and/or staining in the concrete?		✓	
a. Location:			
b. Size (Diameter):			
c. Apparent Source:			
8. Is there any evidence of animals burrowing underneath the slab?		✓	
a. Location:			
b. Diameter of hole:			

Additional Inspection Items	Y	N	N/A	Location
Abrasion		✓		
Blistering	✓			sealant is blistering
Chemical Deterioration		✓		
Honeycombing		✓		
Pitting	✓			some pitting
Reinforcement Corrosion		✓		
Spalling		✓		
Other		✓		

Inspector: Mark A Zeveg Company: Wood. Date: 11-14-17

Thermo King Concrete Building Slab
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, Georgia
Project: Building Slab Inspection
Date: 11/14/2017
Photo #: 2460
Photographer: M. Andrews
Description: Typical slab condition

Client: Ingersoll Rand
Location: ThermoKing, Louisville, Georgia
Project: Building Slab Inspection
Date: 11/14/2017
Photo #: 2462
Photographer: M. Andrews
Description: Typical building interior

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Thermo King Concrete Building Slab
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Building Slab Inspection
Date: 11/14/2017
Photo #: 2467
Photographer: M. Andrews
Description: typical painted floor area. Evidence of birds nesting in building. Egg shells and droppings present on the floor.

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Building Slab Inspection
Date: 11/14/2017
Photo #: 2465
Photographer: M. Andrews
Description: Typical slab condition

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Thermo King Concrete Building Slab
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Building Slab Inspection
Date: 11/14/2017
Photo # 2468
Photographer: M. Andrews
Description: Possible floor settling in small area between columns N3 and M3

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Building Slab Inspection
Date: 11/14/2017
Photo 2469
Photographer: M. Andrews
Description: Possible floor settling in small area between columns N3 and M3

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Rip-Rap Blanket Inspection Checklist – Thermo King, Louisville, Georgia

Inspection Item	Observation		Condition			Weather Conditions: _____
	Yes	No	NA	MN	IA	Comments (Indicate Locations on Figure D-1 and Attach
1. Access Road						
Erosion	✓		✓			
Ruts/Depressions	✓		✓			
Excess Vegetation/Fallen Trees	✓		✓			
2. Rip-Rap Flume To Check Dam						
Erosion	✓		✓			SOME EROSION @ TOP -
Settlement of Rip-Rap	✓		✓			
Sediment Build-up in Check Dam	✓	✓	✓			SEDIMENT BUILD-UP @ BOTTOM - WATER ON SURFACE & VEGETATION
Excess Vegetation/Fallen Trees	✓					VEGETATION - NO FALLEN TREES
3. MB#2 Rip-Rap Blanket						
Erosion	✓		✓			
Settlement of Rip-Rap	✓		✓			
Water Flowing on Surface	✓		✓			
Sediment Build-up/Plugging	✓		✓			
Excess Vegetation/Fallen Trees	✓		✓			
Sampling Vault Condition	✓			✓		
4. Seep H Rip-Rap Blanket						
Erosion	✓					
Settlement of Rip-Rap	✓					

Rip-Rap Blanket Inspection Checklist – Thermo King, Louisville, Georgia

Inspection Item	Observation		Condition			Weather Conditions: _____
	Yes	No	NA	MN	IA	Comments (Indicate Locations on Figure D-1 and Attach
Water Flowing on Surface	✓					RIP RAP SETTLED – WATER ON TOP
Sediment Build-up/Plugging	✓					SOME BUILD-UP
Excess Vegetation/Fallen Trees	✓					NO FALLEN TREES
Sampling Vault Condition	✓			✓		
5. Vegetated Embankment						
Erosion	✓					MINIMAL EROSION
Fallen Trees	✓					NO FALLEN TREES
Bare Spots	✓					SOME BARE SPOTS
6. Other Observations						

Date of Inspection:	11-14-17	Inspector:	EVER GUILLEN / Mark Andrews (Print)
			(Signature)

12/14/2016

NA = No Action Needed
MN = No Maintenance Needed
IA = Immediate Attention Needed

Thermo King Rip Rap Blanket
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, Georgia
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2343
Photographer: M. Andrews
Description: fallen tree branches and vegetation along access road.

Client: Ingersoll Rand
Location: ThermoKing, Louisville, Georgia
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2349
Photographer: M. Andrews
Description: Vegetation along access road.

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Thermo King Rip Rap Blanket
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2353
Photographer: M. Andrews
Description: check dam at the end of the access road, above the rip rap slope.

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2390
Photographer: M. Andrews
Description: Erosion at the base of a tree on the top slope of the left bank looking down toward MB#2

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Thermo King Rip Rap Blanket
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2401
Photographer: M. Andrews
Description: Riprap blanket looking down at MB#2 from top of slope

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo 2409
Photographer: M. Andrews
Description: Riprap blanket and check dam at MB#2

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Thermo King Rip Rap Blanket
Louisville, Georgia
Photographic Log

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2413
Photographer: M. Andrews
Description: check dam at MB#2

Client: Ingersoll Rand
Location: ThermoKing, Louisville, GA
Project: Riprap Blanket Inspection
Date: 11/14/2017
Photo #: 2421
Photographer: M. Andrews
Description: Riprap blanket looking up slope from MB#2

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