Lower Duwamish Waterway Source Control: Green River Watershed Surface Water Data Report

FINAL

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King County

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King County Wastewater Treatment Division
Department of Natural Resources and Parks

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Citation

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Acronyms

µg/L	micrograms per liter
AXYS	AXYS Analytical Services
CFS	cubic feet per second
cm	centimeters
CSOs	combined sewer overflows
CVAF	cold vapor atomic fluorescence
DOC	dissolved organic carbon
Ecology	Washington Department of Ecology
EPA	U.S. Environmental Protection Agency
FOD	frequency of detection
FSU	Field Science Unit
HPAHs	high molecular weight polycyclic aromatic hydrocarbons
HRGC/HRMS	high-resolution gas chromatography/high-resolution mass spectroscopy
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
KC	King County
KCEL	King County Environmental Laboratory
L	liter
LDC	Laboratory Data Consultants, Inc.
LDW	Lower Duwamish Waterway
LIMS	King County Laboratory Information Management System
LMCLs	lowest method calibration limits
LPAHs	low molecular weight polycyclic aromatic hydrocarbons
MDL	method detection limit
mg/L	milligrams per liter
mL	milliliter
MS	matrix spike
MSD	matrix spike duplicate
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
pg/L	picograms per liter

QA	quality assurance
QC	quality control
r^2	coefficient of determination
RDL	reporting detection limit
RI	remedial investigation
RO	reverse osmosis
RPD	relative percent difference
SAP	sampling and analysis plan
SDL	specific detection limit
SOP	standard operating procedure
SPE	solid-phase extraction
TOC	total organic carbon
TSS	total suspended solids
USGS	United States Geological Survey
WTD	King County Wastewater Treatment Division

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EXECUTIVE SUMMARY

King County is currently conducting several studies to characterize potential sources of contaminants of concern identified in the Lower Duwamish Waterway (LDW) Superfund site. These studies evaluate chemical concentrations in water, sediment and suspended solids in the Green River Watershed and in atmospheric deposition within the Green/Duwamish River Watershed that may contribute chemical inputs to the LDW. The water quality study presented here is one of these studies.

This study presents an assessment of water quality in the Green River Watershed to better understand the relative contribution of contaminants of concern for the LDW from upstream areas in the Green River. These contaminants of concern are key human health risk drivers and include arsenic, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). The study was designed to address the following questions:

1) How do the relative contributions of arsenic, PAHs and PCBs differ between dry season/baseflow and wet season/storm conditions?
2) What are the relative spatial differences in arsenic, PAH and PCB concentrations in the Green River and its major tributaries?

This study includes collection and analysis of surface water samples from four major tributaries to the Green River (Newaukum, Soos and Mill creeks and the Black River), as well as at two locations on the main stem Green River: an upstream location at Flaming Geyser State Park (upriver of the tributary sampling sites), and a downstream location at Foster Links Golf Course (downstream of the tributaries). At each of the six locations, three composite samples were collected during the dry season to represent baseflow conditions, while six composite samples were collected during storm events. All samples were analyzed for arsenic, PAHs, PCBs as congeners, total organic carbon (TOC), dissolved organic carbon (DOC) and total suspended solids (TSS). These data will be used as a line-of-evidence to evaluate upstream contaminant sources to the LDW, improve the understanding and nature of these inputs (e.g., influence of storm events), and inform future source control efforts in the watershed.

This study also evaluated the ability of an ISCO® autosampler to collect a composite sample that was representative of conditions within the cross-section of the Green River. To do this, composite samples were collected at the Foster Links Golf Course location using two methods: (1) the same methodology described for this study (autosampler collection from one river location) and (2) grab samples from multiple locations over a river cross-section.

The study results indicate that for some parameters, significant[1] differences in concentration were observed between baseflow and storm event conditions. In addition, significant differences in concentration were also observed between some sampling

[1] Use of the term "significant" refers to a statistically significant difference based on a statistical analysis.

locations for TOC, DOC, total and dissolved arsenic, PCBs and HPAHs; no significant differences were observed between any location for TSS or LPAHs. Overall, concentrations of arsenic and total PCBs in the Green River study area are within the range or lower than those observed in a study that included the Puyallup and Snohomish watersheds. In both studies, detection frequencies for individual PAHs were low. The following bullets present additional detailed findings of the Green River water study.

Comparison of baseflow and storm event conditions:

- Total PCB, LPAH, HPAH and TSS concentrations were generally greater during storm events than under baseflow conditions. Significant differences between baseflow and storm event concentrations were observed at the Black River Pump Station for total PCBs, TSS, dissolved arsenic, and HPAHs and at Newaukum, Soos, and Mill creeks combined for TSS. Dissolved arsenic differed in the tributaries where there were significantly higher concentrations during baseflow compared to storm events.

Comparison between sampling locations:

- During storm events, mean TOC and DOC concentrations were highest in Mill Creek, which were significantly higher than concentrations in the two main stem Green River locations. TSS concentrations during storm events were highest at the Green River - Foster Links location, followed by Mill Creek; however, no significant differences were observed between any sites.

- During baseflow conditions, mean arsenic concentrations were within a factor of two at all sampling sites. During storm events, total and dissolved arsenic concentrations in Mill Creek were significantly higher than those detected in the two most upstream locations (Green River – Flaming Geyser and Newaukum Creek). During storm events, total arsenic concentrations in the Black River were also significantly greater than those in Newaukum Creek, as were dissolved arsenic concentrations in Mill Creek compared to the downstream Green River-Foster Links location.

- LPAH concentrations were variable across sites under both baseflow and storm event conditions and no significant differences were detected. Storm event HPAH concentrations were highest at the three most downstream locations: Mill Creek, Black River and the Green River - Foster Links location. During storm events, the highest HPAH concentrations were detected at the Black River Pump Station, which were significantly higher than concentrations measured at the three most upstream sites (Green River – Flaming Geyser, and Newaukum and Soos creeks).

- During storm events, total PCB concentrations were generally higher at the three most downstream locations: Mill Creek, Black River and the Green River - Foster Links location. PCB levels at the Black River Pump Station were significantly higher than at the Green River – Flaming Geyser site, Newaukum Creek, and Soos Creek. Under baseflow conditions, mean total PCB concentrations were highest in Soos Creek; however, elevated total PCB levels were detected in one sample and this data point greatly influenced the overall mean concentration.

- When storm event concentration data for the upstream and downstream Green River main stem locations were compared, significantly higher DOC, total arsenic and total HPAH concentrations were detected at the downstream location (Foster Links). No other significant differences were detected.

Evaluation of Sampling Methods:

- The comparison of sampling methods suggests that composite samples collected with the ISCO® autosampler deployed on the river bank are representative of conditions within the cross section of the Green River for all parameters except PCBs under baseflow conditions. The autosampler method yielded the higher PCB concentrations in both the baseflow and storm event sample pairs, with the most influential congeners including those indicative of contamination from silicone tubing (i.e., PCB-47, PCB-51, and PCB-68). After adjusting for the equipment contamination (see Section 5.6.1), storm event samples were comparable for the two methods, but baseflow samples still showed substantial differences, which could be due to environmental variability.

Collection of additional surface water data from the Green River Watershed is underway to further evaluate contaminant concentrations in the upper reaches of the Green River, both above and below the Howard Hanson Dam. Data collection from locations further upstream will provide additional water quality information from areas further removed from development and urbanization.

1.0. INTRODUCTION

In 2018, King County completed a study that confirmed using standard silicone tubing in sample collection and processing of surface water samples results in a consistent, high bias to total PCB concentrations (King County 2018). This report has been revised to reflect these findings. The PCB totals in this revised version exclude the PCB congeners (i.e., PCB-47, PCB-51, and PCB-68) associated with the silicone tubing used in sampling. The results and conclusions for PCBs in previous versions of this report are superseded by this revised report. Please see the PCB Equipment Blank Study (King County 2018) for more details.

This study presents an assessment of water quality in the Green River Watershed to better understand the relative contribution of contaminants of concern for the Lower Duwamish Waterway (LDW)[2] from upstream areas in the Green River. These contaminants of concern are key human health risk drivers and include: polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and arsenic. The study was designed to address the following questions:

1) How do the relative contributions of arsenic, PAHs and PCBs differ between dry season/baseflow and wet season/storm conditions?
2) What are the relative spatial differences in arsenic, PAH and PCB concentrations in the Green River and its major tributaries?

This study includes collection and analysis of surface water samples from four major tributaries to the Green River, as well as at two locations on the main stem Green River: an upstream location at Flaming Geyser State Park (upriver of the major tributaries being sampled), and a downstream location at Foster Links Golf Course (downstream of the tributaries) (Figure 1). In addition to the questions listed above, the study also evaluated the ability of an ISCO® autosampler to collect a composite sample that was representative of conditions within the cross-section of the Green River. This data report presents and discusses the results of the 2011/2012 sampling program (King County 2011a) with respect to the questions posed above.

This report is organized as follows: study background and geographic study area (Section 1.0); sample collection and processing methods (Section 2.0); laboratory analytical methods (Section 3.0); data analysis procedures (Section 4.0); study results (Section 5.0); sampling evaluation method (Section 6.0); and discussion and conclusions (Section 7.0). Supporting appendices include chain of custody forms, laboratory data results, chemistry data validation reports, and correlation analyses.

[2] The LDW is about 5 miles long and consists of the downstream portion of the Duwamish River, excluding the East and West Waterways.

1.1 Study Background

King County is a member of the Source Control Work Group (SCWG) for the LDW Superfund site. Other members include Washington Department of Ecology (Ecology; lead agency), the Environmental Protection Agency (EPA), City of Seattle, and the Port of Seattle. The SCWG collaborates to understand potential sources of contaminants to the LDW Superfund site and works to control and reduce sources that can contaminate sediments and resident fish and shellfish in the waterway. King County wants to better understand potential sources of the contaminants of concern identified in the LDW Superfund site that may contribute chemical inputs to the LDW and is currently conducting several studies to evaluate chemical concentrations in various media in the Green/Duwamish Watershed.

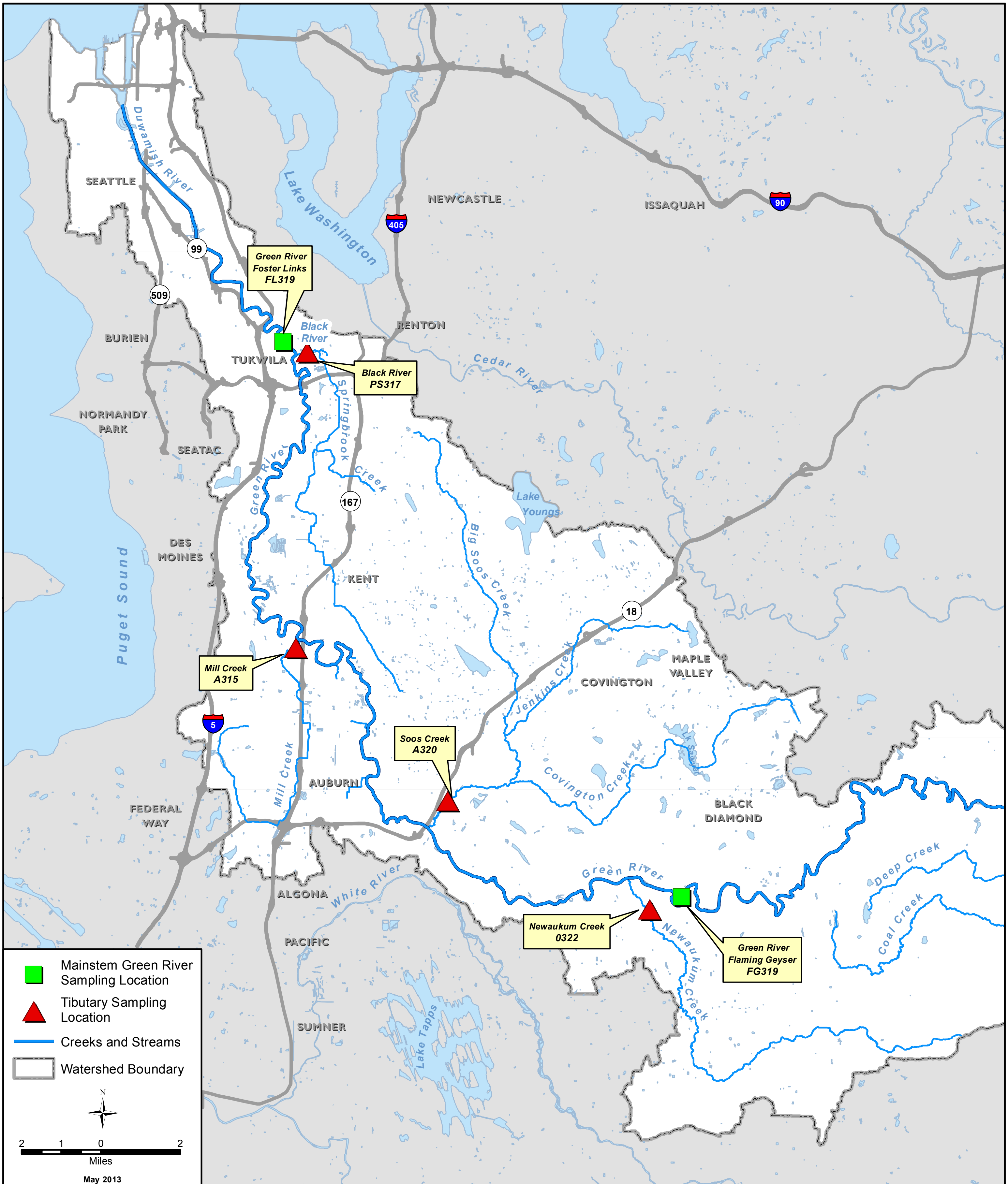

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Figure 1

Surface Water Sampling Locations

King County previously completed chemical analysis of whole water samples at a number of combined sewer overflows (CSOs) in the LDW Basin (King County 2011b) and has been characterizing solids within the combined sewer structures and lines that discharge to the LDW (King County 2011c). King County is currently conducting studies to evaluate chemical concentrations in sediment and suspended solids in the Green River Basin (King County 2012a, King County 2013a) and chemical mass flux in atmospheric deposition within the Green/Duwamish River Watershed (King County 2011d). The water quality study presented here is intended to complement data from these additional studies, as well as present a characterization of water quality for select parameters within the Green River Watershed.

The LDW Remedial Investigation (LDW RI) (Windward 2010) indicates that more than 99% of the new sediment deposited in the LDW each year originates upstream of the LDW in the Green/Duwamish River. As a result, future LDW surface sediment quality will be closely tied to the quality of incoming sediment from the Green/Duwamish River. Previous assessments have been conducted to evaluate chemical concentrations in surface water and suspended solids in the Green/Duwamish River system (Herrera 2005; Herrera 2007; Gries and Sloan 2009; Windward 2010). The Green River Water Quality Assessment (WQA) evaluated conventional parameters, nutrients, bacteria, metals, and organic compounds in the Green/Duwamish River (Herrera 2005). However, most organic compounds were infrequently or never detected. In particular, PAHs had low detection frequency and PCBs (as Aroclors®) were not detected, in part due to analytical methods and associated method detection limits. While arsenic concentrations in the Green River main stem and associated tributaries were characterized in this 2005 study, additional data were deemed useful for comparison to past findings.

The purpose of this study is to provide a better understanding of the relative surface water concentrations of these contaminants, particularly PCBs and PAHs, from the major tributaries to the Green/Duwamish River. These data will be used as a line-of-evidence to evaluate upstream contaminant sources to the LDW, improve the understanding and nature of these inputs (e.g., influence of storm events), and inform future source control efforts in the watershed.

This study focuses on arsenic, PAHs, and PCBs because the LDW RI identified these chemicals as contaminants of concern for human health within the LDW and residual risks from resident seafood consumption are predicted to be present following cleanup. Dioxins/furans were also identified as contaminants of concern for human health; however, these compounds were not included in this study as they are not expected to be present at detectable levels in surface waters.

1.2 Study Area

The Green-Duwamish Watershed includes approximately 484 square miles of varied terrain and land uses ranging from forested headwater areas at the crest of the Cascade Mountains to the industrial and port facilities of the LDW and East and West Waterways. The study area encompasses the Lower Green/Duwamish River and middle Green River portions of the Green/Duwamish Watershed and the following major tributary basins:

Newaukum, Soos and Mill Creeks and the Black River. The study area extends from the Green River at Flaming Geyser State Park (River Mile 41)[3] to the Green River[4] at Foster Links Golf Course (River Mile 10) and includes the major tributaries entering the Green River between these locations. The size of the drainage area included upstream of each Green River main stem sampling location and each tributary basin is shown in Table 1.

Table 1. Main Stem Green River and Tributary Basin Acreages for Each Sampling Location.

Site	Acreage
Main Stem Sites	
Green River – Flaming Geyser	166,028[a]
Green River – Foster Links	294,339[a]
Tributary Basins	
Newaukum Creek	17,280
Soos Creek	42,347
Mill Creek	10150
Black River	17,231

[a] Includes all upstream basins except closed systems (Coal and Deep Creeks)

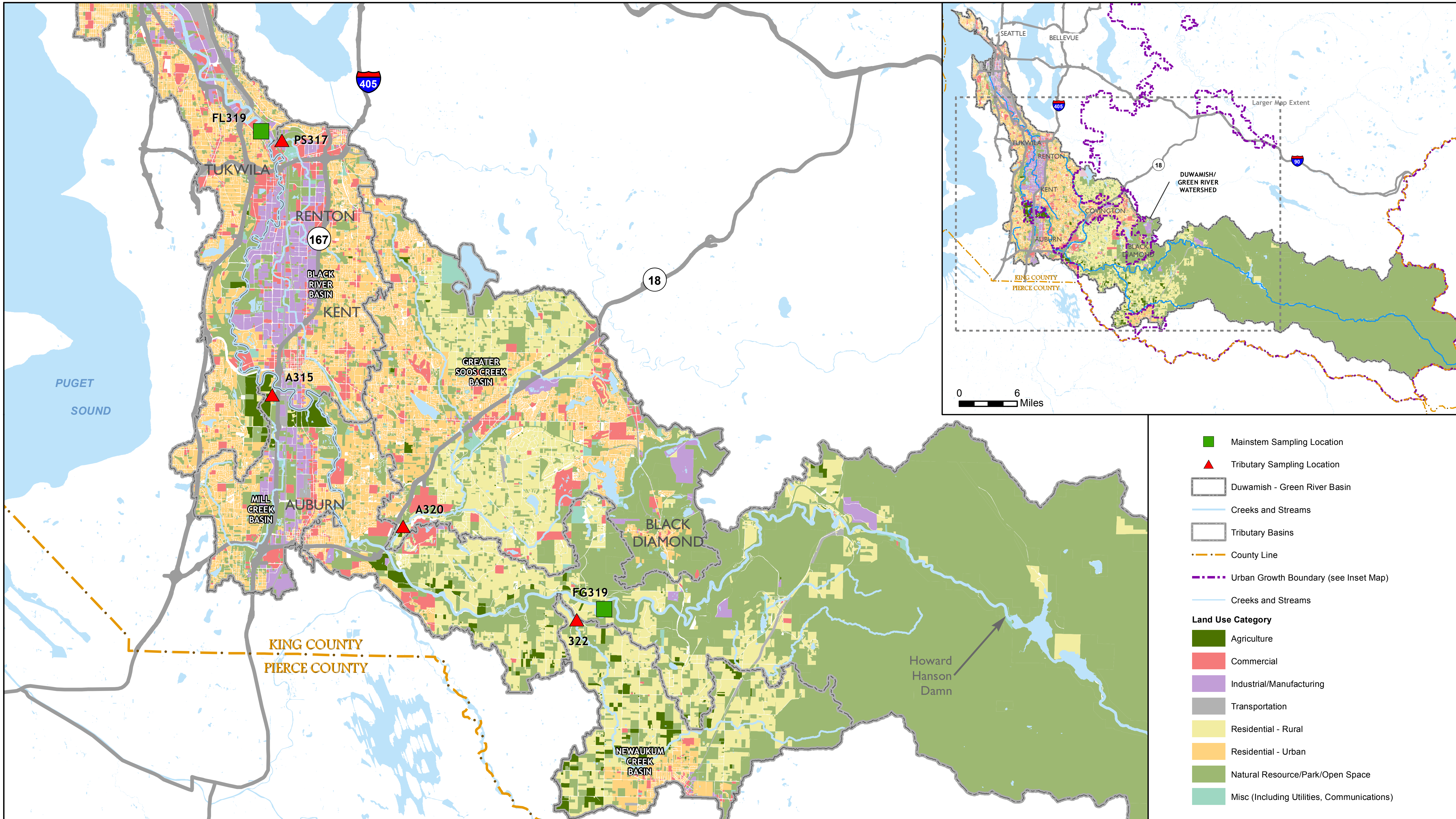
The Green-Duwamish Watershed encompasses a wide variety of current land uses[5] (Figure 2). Land use in the Upper Green River Basin, above the Howard Hansen Dam, consists of natural resource land: much of which is within a protected watershed that serves as a drinking water source. Land use in the middle Green River above Flaming Geyser State Park largely consists of natural resource/open space, in addition to some residential land use (Figure 2). Land use in the Newaukum and Soos creek basins is dominated by residential and natural resource/open space. However, the Soos Creek Basin also includes some commercial and utilities land use. Of the tributary basins, land use in the Black River and Mill Creek basins is the most diverse. The Mill Creek Basin consists of mixed land use with approximately 51% residential and natural resources, 13% manufacturing/industrial, 8% commercial and 6% agricultural land (Figure 3). The Black

[3] River mile designations are based on river mile 0 being at the southern end of Harbor Island; consistent with LDW site river mile designations.

[4] This area of the river is also referred to as the Duwamish River. The Duwamish River originates at the confluence of the Green and Black Rivers near Tukwila, Washington and flows northwest for approximately 19 km (12 mi), splitting at the southern end of Harbor Island to form the East and West Waterways, prior to discharging into Elliott Bay in Puget Sound, Seattle, Washington.

[5] Land use categories represent current use (i.e., were not based on zoned uses) and as such were designated based on King County Assessor data from May 2013. Residential land was split into urban and rural based on the Urban Growth Area Line for 2013. Parcels with over 50% cultivated land cover, based on the 2007 Land Cover classification, were designated as agricultural land.

River Basin contains the largest percentage of commercial and manufacturing/industrial land (33%) (Figure 3). While land use in the area immediately adjacent to the Green River in the vicinity of the Foster Links Golf Course is dominated by residential land use, it also includes commercial and manufacturing/industrial uses (Figure 2). Land use in all of the upstream drainages is dominated by natural resource/open space and residential uses.



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**Land use categories were designated based on King County Assessor data from May, 2013. Residential land was split into urban and rural based on the Urban Growth Area Line for 2013. Parcels with over 50% cultivated land cover, based on the 2007 Landsat Landcover classification, were designated as agricultural land.*

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Figure 2
Sampling Locations And Land Use In The Duwamish/Green Watershed

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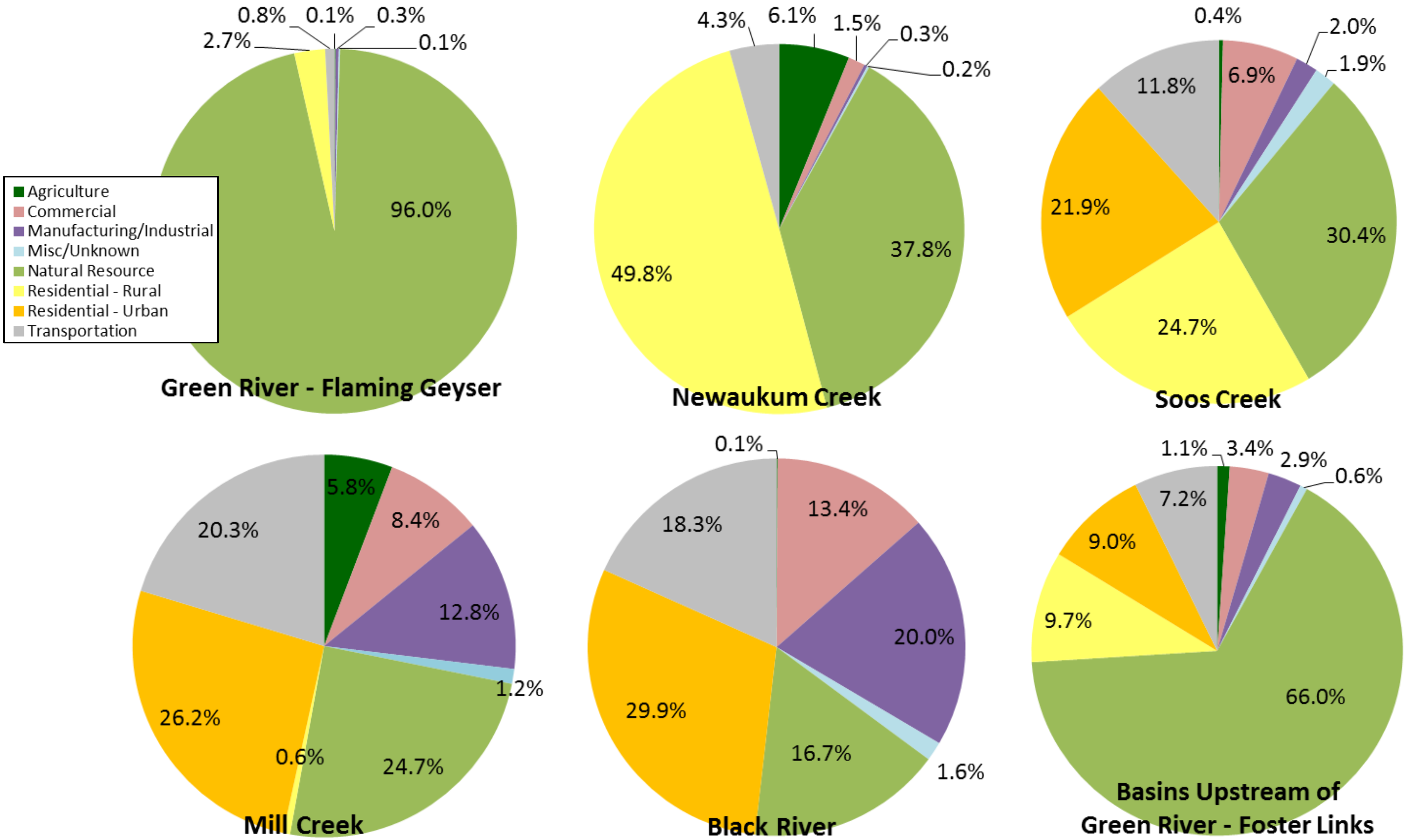


Note: land use associated with the Green River – Flaming Geyser and Green River – Foster Links sites is characterized as the entire watershed upstream of each of these locations (excluding closed systems).

Figure 3. Percent Current Land Use Associated with Each Sampling Site

2.0. FIELD SAMPLING METHODS

The following section provides an overview of the field sampling methods used in this study. The field procedures used to characterize concentrations of arsenic, PAHs and PCBs in surface waters from the Green River and four major tributaries are presented in greater detail in the study project Sampling and Analysis Plan (SAP) (King County 2011a), while field procedures to evaluate sampling methods are detailed in the SAP addendum (King County 2012b). The sampling locations are described in Section 2.1. Section 2.2 summarizes the flow data collection methods and Section 2.3 describes the sampling schedule and summarizes the collection methods. Section 2.4 summarizes the sample processing methods and finally, Section 2.5 describes deviations from the SAP encountered over the sampling period related to field sampling methods. Copies of completed chain of custody forms used to track sample custody are included in Appendix A.

2.1 Sample Locations

Water samples were collected from six locations in the Green River Watershed during both dry season baseflow conditions and wet season storm events. Two sampling sites were located on the main stem Green River; an upstream location at Flaming Geyser State Park (upriver of the major tributaries being sampled), and a downstream location at Foster Links Golf Course in Tukwila (downstream of the tributaries) (Figure 1)[5]. Samples were also collected from four tributaries to the Green River: Newaukum, Soos and Mill creeks and the Black River at the pump station (Figure 1). The Black River Pump Station regulates discharge from the Black River at a dam located about 1000 feet above its confluence with the Green River. The pump station regulates flow of water from the Black River drainage basin into the Green River and serves to block high flows from the Green River from flooding up into the Black River, Springbrook Creek, and the Earlington Industrial Park in Renton. Water is discharged at this location through a series of pumps and a seasonal fish passage channel.

Samples from Newaukum and Soos creeks were collected near the mouth above their confluence with the Green River. During baseflow conditions samples from Mill Creek were collected downstream of the West Valley Highway bridge; storm event samples were collected on the upstream side of the bridge to avoid the influence of backwater conditions that can occur during high flows in the Green River.

Baseflow samples at the Black River Pump Station were collected from the fish passage channel. The fish passage channel is only operational during periods when fish passage is necessary (late summer, early fall); typically there is no flow through this channel during the wet season. The SAP (King County 2011a) specified that storm event samples would be collected from the Black River Pump Station on the downstream side of the dam during

[5] The Green River is often referred to as the Duwamish River at the confluence with the Black River. In this report, the main stem sampling location at Foster Links downstream of the confluence with the Black River is referred to as Green River rather than Duwamish River.

periods of pump operation. Unfortunately, pump operations were not predictable; therefore, the sampling location was shifted to the area just behind the dam (in the pooled area) at the depth of the pump intakes. The station coordinates, locators, and locator description associated with the six sampling locations are presented in Table 2. Samples to compare sampling methodologies were collected from the main stem Green River -Foster Links location.

Table 2. Green River and Tributary Sampling Locations and Locator Names

Locator	Locator Description	Approximate River Mile[a]	State Plane Northing[b]	State Plane Easting[b]
FG319	**Green River – Flaming Geyser** State Park, upstream location	41	104038	1341097
0322	Mouth of **Newaukum Creek**	40	102390	1336841
A320	Mouth of **Soos Creek**	33	116821	1309972
A315	**Mill Creek** in the vicinity of the West Valley Highway Bridge crossing	23	137218[b]	1289725[b]
PS317	**Black River** at the Black River Pump Station	10	176593	1291222
FL319	**Green River – Foster Links** Golf Course, downstream location	10	177997	1288012

[a]River Miles are based on south end of Harbor Island (lower boundary of LDW Superfund site) as river mile 0.0. Tributary river miles are approximately where they discharge into the Green River.

[b]Northing and easting at the Mill Creek site are approximate due to slightly different sampling locations for collection of baseflow and storm event samples.

2.2 Flow Data Collection

Flow data were collected or estimated at all sites during the sample collection period. Flow data at Newaukum and Soos creeks were based on US Geological Survey (USGS) gage data (Gage 12108500 and Gage 12112600, respectively); both gages are adjacent to the sample collection sites. Green River flow at Flaming Geyser was estimated based on the USGS gage below the Howard Hanson Dam (Gage 12105900), while flow at the Foster Links location was estimated based on flow at the USGS Auburn gage (Gage 12113000). A continuous flow gage in the vicinity of the Mill Creek sampling location has not been established. Therefore, flow during storm events was estimated using an ISCO® flow meter deployed during sampling. During baseflow events instantaneous flow was manually measured using a Swoffer flow meter just prior to and following completion of sample collection. Due to the relocation of the Black River sampling location described above in Section 2.1, it was not feasible to collect flow or discharge data at this site during storm events. Discharge from the fish passage channel at the Black River Pump Station during collection of baseflow samples was estimated based on the pumping rate. The flow data are presented in Section 5.7.

2.3 Sampling Schedule and Collection

All samples were collected according to methods described in the SAP (King County 2011a) and the SAP addendum (King County 2012b). Composite surface water samples were collected using ISCO® autosamplers equipped with 10-liter glass carboys. Teflon tubing was dedicated to each sampling location. Samples to evaluate the sampling methodologies were collected using both an autosampler placed in a single location and a Scott Bottle deployed at equal intervals over the cross-section of the river. Storm event sampling was triggered by specific rainfall conditions of at least 0.25 inch with a minimum 24-hour antecedent dry period. Samples were analyzed for arsenic, PAHs, PCB congeners, total organic carbon (TOC), dissolved organic carbon (DOC), and total suspended solids (TSS).

The following rain gages, maintained by King County, were used to estimate precipitation in the vicinity of sampling locations:

- Black River Pump Station and main stem Green River at Foster Links Golf Course – TUKW (Tukwila)
- Mill Creek – SEQU (Sequoia Jr. HS, Kent)
- Soos Creek – 32U (Lower Green, N. Auburn)
- Newaukum Creek and main stem Green River at Flaming Geyser State Park - 40U (Middle Green)

Precipitation data associated with storm sampling events are presented in Section 5.7. The following sections provide a summary of the sample collection activities and schedule.

2.3.1 Green River and Tributary Surface Water Characterization - Baseflow Sample Collection

Three sets of baseflow samples were collected in September 2011 following a minimum 3-day antecedent dry period. All baseflow samples were 24-hour time-weighted composites where autosamplers were programmed to draw a sample aliquot at 30 minute intervals. Baseflow samples were collected at all six locations; samples at the Black River were collected from the fish passage channel which was representative of discharge from the Black River during the dry season (no other pumps were running during the collection period). The specific sample collection dates are presented in Table 3; a total of 18 baseflow samples were collected.

Table 3. Summary of Samples Collected during Baseflow Conditions

Location	2011						Total Count
	9/6	9/7	9/12	9/13	9/14	9/15	
Green River - Flaming Geyser		X	X	X			3
Newaukum Creek	X	X	X				3
Soos Creek	X	X		X			3
Mill Creek	X	X	X				3
Black River				X	X	X	3
Green River - Foster Links				X	X	X	3
Total Number of Baseflow Samples							**18**

2.3.2 Green River and Tributary Surface Water Characterization - Storm Event Sample Collection

Six 24-hour flow-weighted composite storm event samples were collected during the wet season (October through April) from each of three tributary locations (Newaukum, Soos and Mill). Collection of flow-weighted composite samples from the Black River was not appropriate because flow is managed by the pump station; time-weighted composite samples were collected from this location. All sampling was conducted for a maximum of 24 hours, with the exception of four events at Newaukum Creek, one event at Soos Creek and three events at Mill Creek (see Section 2.5).

As previously discussed, the Black River storm event sampling location was relocated to the pooled area behind the dam. The autosampler intake was located behind the dam near the intake for Pump #1 and programmed to collect 24-hour time-weighted composite samples (aliquots collected at 30 minute intervals). One field replicate was collected from the Black River.

Six storm event samples were collected from each of the two Green River main stem locations. Section 2.2 of the SAP specified that, if possible, three of the six storm samples were to be collected from the main stem Green River locations when the Howard Hansen Dam was not releasing a significant volume of water (assumed to be 2,000 cubic feet per second [cfs] based on flow at the USGS gage [12105900] below Howard Hanson Dam). All but two of the six samples from both main stem locations were collected when dam releases were less than 2,000 cfs (samples taken on 1/31/2012 and 2/24/2012 were collected during flows above 2,000 cfs). One field replicate sample was collected at the Green River –Flaming Geyser location. All main stem samples were collected as 24-hour time-weighted composites programmed to collect sample aliquots at 30 minute intervals.

All storm event samples were triggered based on a predicted minimum of 0.25 inches of precipitation. Sample collection dates are presented in Table 4; a total of 25 storm samples were collected from the tributaries, while 13 storm samples were collected from the two Green River main stem locations.

Table 4. Sample Collection Dates and Number of Samples Collected for Storm Event Conditions

Location	2011	2012								Total Count
	11/16	1/31	2/24	3/5	3/10	3/20	3/29	10/31	11/19	
Green River-Flaming Geyser		X	X	X	X	X	X[a]			7
Newaukum Creek		X	X	X	X	X			X	6
Soos Creek	X	X	X	X	X	X				6
Mill Creek	X	X			X	X	X	X		6
Black River	X	X		X		X	X	X[a]		7
Green River-Foster Links	X	X	X	X	X	X				6
Total Number of Storm Samples Collected										**38**

[a] Field replicate sample collected.

2.3.3 Evaluation of Sample Collection Methods

Evaluation of the autosampler collection method was conducted at the Green River – Foster Links location from the golf cart bridge within the Foster Links Golf Course. This evaluation was not conducted at the tributary locations as these water bodies are relatively small and well mixed; therefore, the opportunity for bias is less likely. Samples were collected on September 13 and December 3, 2012 to represent baseflow and storm event conditions, respectively. Samples were collected using two methods: (1) an ISCO® autosampler deployed in the same manner as described in Section 2.3.1 and 2.3.2; and (2) a Scott Bottle deployed at multiple locations over the cross-section of the river. Sample collection using both methods was initiated simultaneously.

The pre-cleaned Scott Bottle was deployed at approximately 2-3 meter intervals at 16 locations over the cross-section of the river. During the baseflow sampling event, maximum river depth was approximately 2 meters; however, depth in much of the cross-section ranged from 1.0-1.5 meters, with the exception of the very shallow east bank area that was not sampled. During baseflow conditions the Scott Bottle was deployed at mid-depth at each cross-section sample location. However, during the storm event sample collection the river depth was much greater, with a maximum depth of about 5.5 meters. At five of the 16 cross section locations, the Scott Bottle was deployed at multiple depths (1 and 4 meters below the water surface) to better capture the water quality conditions within the channel. A 500 ml sample aliquot was collected from each Scott Bottle cast and transferred to a 10-L pre-cleaned glass carboy. Three replicate samples were collected during each of the two sampling events.

The autosampler was deployed on the stream bank; the intake collection tubing was placed in the river channel approximately 6-8 feet from the bank. The intake tubing was placed at least 4-6 inches above the stream bottom by attaching it to a secure object (i.e., staff gage, fence post, railing, or cinder block). The autosampler was programmed to collect a 500 ml aliquot every 2-3 minutes. During both baseflow and storm event sampling, the autosampler was initially programmed to collect a sample aliquot at 3 minute intervals; however, the interval was changed to 2 minutes because the cross-section sampling effort

took less time than expected. Three replicate samples were collected during each of the two sampling events. The autosampler collected 17 (3 minute interval) or 18 (2 minute interval) sample aliquots per replicate.

Equipment blanks were not collected for this portion of the project. All samples were analyzed for total and dissolved arsenic, PAHs, TOC, DOC, and TSS; only one sample collected per method and event was analyzed for PCB congeners. A total of 12 samples were collected (Table 5).

Table 5. Sample Collection Dates and Number of Samples Collected for Sampling Methodology Evaluation

Sample Type	Number of Samples	
	Baseflow (9/13/2012)	Storm Event (12/3/2012)
Autosampler Composite (one location adjacent river bank)	3[a]	3[a]
Cross section Composite (multiple locations within river cross section)	3[a]	3[a]

[a] Only 1 sample analyzed for PCB congeners.

2.4 Sample Processing

As soon as possible following the completion of a sampling event, King County Field Science Unit (FSU) staff retrieved the sample carboys, and transported them on ice to the King County Environmental Laboratory (KCEL). The composite samples were then homogenized and transferred into the appropriate laboratory sample containers. Dissolved arsenic samples were filtered during the sample splitting process using a peristaltic pump. Because the dissolved arsenic sample aliquot could not be filtered within 15 minutes of collection, KCEL applied the appropriate hold-time violation flags to the data.

One field equipment blank was collected at the KCEL on October 31, 2012. The field equipment blank is used to evaluate levels of contamination that might be associated with the sampling equipment and introduce bias into the sample result. An aliquot of a clean reference matrix (reverse osmosis water) was processed through the sampling equipment as a blank and analyzed for total and dissolved arsenic, PAHs, PCBs, TOC, DOC and TSS.

Samples for PCB congener analysis were delivered to AXYS Analytical Services (AXYS) within 1 to 4 months of sample collection. Samples were held at the KCEL at the appropriate temperature until delivery date. Samples were either driven to AXYS or shipped via overnight express delivery service.

2.5 Field Sampling Deviations from the SAP

All field sampling methods were conducted according to the SAP (King County 2011a) and the SAP addendum (King County 2012b) except where noted below.

- Section 2.2 of the SAP specified that storm event sampling at Newaukum, Soos and Mill creeks, would be triggered at a specific stage height above the estimated wet season baseflow stage. Trigger heights, which were above the estimated wet season baseflow stage, were intended such that a storm of approximately 0.25 to 0.5"rainfall in 12 hours (with a 24-hour antecedent dry period) should be sufficient to trigger sampling; however, less intense but longer duration storms could also initiate sampling. However, in practice, use of trigger heights to initiate sampling was not feasible. For example, at Soos and Newaukum creeks, rainfall events did not result in a large stage height increase, but rather an increase in velocity. In addition, trigger heights designated for Mill Creek presented in the SAP were later determined to have been based on Mill Creek in Kent rather than Auburn. Therefore, only predicted rainfall amounts of at least 0.25 inches were used to trigger storm sampling in these tributaries.
- Section 2.2 of the SAP describes the targeted storm event sampling conditions at the Black River Pump Station. The SAP specified that storm event samples were to be collected based on the number of pumps operating at the Pump Station. Unfortunately, pump operations were not predictable and it was not feasible to track the pumping schedule to anticipate specific flow conditions; during some sampling periods there was sporadic or limited pumping activity. The SAP also specified that storm event samples should be collected from the discharge of one of the series of nine pumps that regulate water release from the dam. As previously indicated pump operations were unpredictable and did not directly coincide with rain events. In responses to these challenges, the autosampler intake was placed just behind the dam near the Pump #1 intake to collect storm samples.
- Section 3.3 of the SAP specifies that the autosampler tubing and carboys would be decontaminated by rinsing with acetone, prior to each use. However, following collection of the baseflow samples it was determined that residual acetone in the tubing resulted in TOC and DOC concentrations that were biased high. As a result, baseflow data for these analytes were rejected (see Section 5.6.1). The biased data finding is based on testing of tubing equipment blanks. Based on this finding, the acetone rinse for both autosampler tubing and the carboy was eliminated for all storm event sample collection. The acetone rinse was intended to reduce the probability of PCB contamination between sampling events at a site. However, given the observed organic carbon bias due to residual acetone, AXYS Analytical agreed to this change. The remaining decontamination procedures for tubing and carboys were continued; therefore, this change was not expected to result in cross-contamination issues for storm event samples.

- Section 3.1 of the SAP specifies that autosamplers should be programmed to collect samples for a minimum of 12 hours and a maximum of 24 hours. However, at three locations the sample period exceeded 24 hours (Table 6), while at one location the sampling period was only 2 hours. While sampling periods exceeding 24 hours are not expected to affect the use of these data, samples collected within a 2 hour time span have the potential to be biased either low or high. The autosampler deployed at Mill Creek on 1/31/2012 was only operational for 2 hours. Flow in Mill Creek during this event was very high and the autosampler pulse rate was set too low to accommodate the elevated flow conditions; as a result, aliquots were collected every two minutes rather than every 30 to 60 minutes. Comparison of analytical data for this sample relative to other Mill Creek storm event samples indicated lower TSS concentrations; however, other parameters were within the range of those detected during other Mill Creek storm events.
- Section 3.7 of the SAP specifies that one field replicate will be collected at each location during the study. However, field replicates were only collected at two of the six locations (Black River and Green River - Flaming Geyser). At the Green River - Foster Links location, FSU staff attempted to collect a field replicate; however, an equipment failure prevented sample collection. Space limitations for securing sampling equipment at Newaukum, Soos, and Mill creeks prevented collection of replicates at these sites. Therefore, the focus of the overall sampling effort was to collect six storm events at each location and field replicates where possible.

Table 6. Sample Collection Events Outside of the 12-24 Hour Collection Period

Duration of Sampling Events Outside Defined 24 hr Period (Hrs)					
Location	Date - 2012				
	1/31	2/24	3/5	3/10	3/20
Mill Creek	2	-	-	30	-
Newaukum Creek	36	25	26	-	32
Soos Creek	25	-	-	-	-

3.0. LABORATORY METHODS

A summary of the laboratory analyses performed on all samples are presented in this section. Laboratory analyses were conducted by KCEL except PCB congeners, which were analyzed by AXYS Analytical Services, Ltd.

The KCEL reports both the reporting detection limit (RDL) and the method detection limit (MDL) for each sample and parameter, where applicable. For PCB congeners a high resolution isotopic dilution based method is used where the MDL and RDL terms are less applicable because limits of quantitation are derived from calibration capabilities and ubiquitous, but typically low level equipment and laboratory blank contamination. Thus, PCB congener data are reported to lowest method calibration limits (LMCLs) and flagged down to the sample specific detection limit (SDL) value. In many cases the SDL may be below the LMCL. The following sections provide a summary of the laboratory methods; greater detail can be found in the study SAP (King County 2011a).

3.1 Arsenic

Total and dissolved arsenic samples were analyzed and reported by EPA Method 200.8 (Inductively Coupled Plasma-Mass Spectrometry [ICP-MS]), KCEL Standard Operating Procedure (SOP) 624.

3.2 Polycyclic Aromatic Hydrocarbons

PAHs samples were prepared by liquid-liquid extraction in general agreement with EPA method 3520C. Samples were analyzed by a modified EPA Method 8270 Gas Chromatography/Mass Spectrometry – Selected Ion Monitoring Large Volume Injection method (GC/MS-SIM LVI), developed for this study (see KCEL SOP 772v0). The specific PAHs analyzed included: 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(g,h,i)perylene, benzo(a)pyrene, benzo(b,j,k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluorene, fluoranthene, indeno (1,2,3-cd)perylene, naphthalene, phenanthrene, and pyrene.

3.3 PCB Congeners

PCB congener analysis followed EPA Method 1668C Revision C (EPA 2010a), which is a high-resolution gas chromatography/high-resolution mass spectroscopy (HRGC/HRMS) method using an isotope dilution internal standard quantification. The analysis included all 209 PCB congeners. AXYS performed the PCB congener analysis according to their SOP MLA-010.

On September 15, 2011, based on EPA's promulgation of a new method, AXYS changed from using Revision A of EPA Method 1668 (EPA 2003) to Revision C of this method (EPA 2010a). Method 1668C provides reliable analyte identification and very low detection limits. Both versions of this method add an extensive suite of labeled surrogate standards before sample extraction. Data are "recovery-corrected" for losses in extraction and clean-

up, and analytes are quantified against their labeled analogues. The principle difference between Method 1668A and 1668C is the replacement of individual laboratory acceptance criteria with inter-laboratory developed acceptance criteria.

3.4 Conventional Water Quality Parameters

All conventional analyses followed Standard Methods protocols (American Public Health Association 1998). TOC and DOC were analyzed following Standard Methods 5310-B and TSS following Standard Methods 2540-D.

3.5 Analytical Deviations from the SAP

All analytical laboratory methods followed those described in the SAP with the following exception:

- Section 4.2 of the SAP specified that for PAH analysis, 1 liter samples would be extracted and concentrated to a final volume of 1.0 ml. While the first seven samples were extracted in one workgroup with a final volume of 1.0 ml, the matrix was clean enough that the final volume was adjusted to 0.5 ml for all other samples to maximize the number of detections.

4.0. DATA ANALYSIS

The analytical data were prepared for data analysis by applying rules for determining PCB and PAH sums and use of laboratory and field replicate data. The details of these calculations, as well as a summary of data analysis methods, are described below. The analytical results presented in report tables represent the precision of the analytical laboratory for each parameter.

4.1 Summation for PAHs and PCB Congeners

For most PAH data analyses, PAHs were summed as low molecular weight PAHs (LPAHs) and high molecular weight PAHs (HPAHs) following the definitions set under the Washington State Sediment Management Standards (Ecology 1995). LPAHs were calculated as the sum of acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, and phenanthrene. HPAHs were calculated as the sum of benzo(a)anthracene, benzo (g,h,i)perylene, benzo(a)pyrene, benzo(b,j,k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno (1,2,3-cd)perylene, and pyrene. PCB data are presented as total PCB concentrations.

For total LPAHs and HPAHs and total PCBs, only detected concentrations of individual PAHs or PCB congeners were included in their respective totals. However, in some instances, no PAH compounds were detected in a sample. When this occurred, the single highest U-flagged value for an individual PAH compound was used to represent the total LPAH or HPAH and flagged as a non-detect result.

4.2 Laboratory and Field Replicates

Laboratory replicates were considered laboratory quality control values and were not used in data analysis, but rather as part of the data validation process. Field replicate results were considered a second estimate of the sample and were combined with their primary sample result using the following rules:

- When sample results were non-detect (U-flagged) in both samples, the higher of two U-flagged values was used. This was often the MDL value.
- When one result was detected and one was a non-detect, the combined value was the average of the detected value and ½ the U-flagged value.
- When both results were detected, the two concentrations were simply averaged.

The total LPAHs, HPAHs, and PCBs were summed prior to applying these rules for field replicates.

4.3 Data Analysis Methods

For summary statistics (e.g. mean and median concentrations), all data were presented on a site-specific basis by baseflow or storm event conditions. These data summaries are presented in Section 5 whereas statistical analyses of the data are presented in Section 6.

The two main stem Green River locations are influenced by dam releases and represent much larger drainage areas relative to the tributaries evaluated here. As a result, the hydrodynamics and source inputs associated with these systems are expected to be different. Based on these differing conditions, comparison of baseflow to storm event conditions were evaluated separately for main stem Green River sites and the tributaries. The Black River was also evaluated separately from the other tributaries because the Pump Station creates unique hydrological conditions (see Section 2.1). Combining the two Green River main stem locations and combining the three tributary locations, allowed for higher statistical power in the analysis due to the increased number of samples.

For comparisons of baseflow to storm event conditions, T-tests were conducted using Sigma Plot 12.0 software. If the data did not pass the Shapiro-Wilk Normality ($p<0.05$) or the Equal Variance ($p<0.05$) tests, then the non-parametric Mann-Whitney Rank Sum Test ($p<0.05$) was performed. These statistical tests were also used to explore differences in concentrations for all parameters between the upstream and downstream main stem sampling locations (Green River – Flaming Geyser and Green River – Foster Links). Parametric t-tests can identify statistical differences in means between two groups, while the Rank Sum tests can identify differences in medians. Unless otherwise noted, t-tests concluding no statistical difference had statistical power of greater than 0.80.

Comparison of storm event concentrations for all parameters across all sites were analyzed using one-way analysis of variance (ANOVA), followed by the Holm-Sidak method for pairwise multiple comparison ($p<0.05$). Baseflow concentrations were not included in the analysis because of low sample size ($N = 3$ per location). The ANOVAs were performed with Sigma Plot 12.0 software. If the data did not pass the Shapiro-Wilk Normality test ($p<0.05$) or the Equal Variance test ($p<0.05$), then the non-parametric Kruskal-Wallis ANOVA on Ranks was performed ($p<0.05$), followed the Tukey Test procedure for pairwise multiple comparison ($p<0.05$). Figures in Section 7.0 have significant differences labelled.

In addition, correlation analysis was conducted to examine relationships between chemical and physical parameters; the findings of this analysis are presented in Section 5.8. Correlation analyses were performed with Sigma Plot 12.0 software. Normality was determined using the Shapiro-Wilk Normality test ($p<0.05$). Pearson Product Moment Correlation analysis was used for normally distributed data while Spearman Rank-Order Correlation tests were used for non-parametric data ($p< 0.05$). Data for the Green River main stem sites were combined for correlation analysis as were three of the tributaries (Newaukum, Soos, and Mill creeks). The Black River was not included in the tributary analysis due to the unique flow conditions at this location (see Section 2.1). Baseflow data were not included in the correlation analysis because of the smaller number of samples, especially compared to the storm event dataset. Although the storm event dataset was used, sample-sizes were still fairly limited. Different correlation results could be observed if an even larger dataset were available.

5.0. RESULTS

The following section provides a summary of the analytical results with sections 5.1 through 5.4 presenting conventional parameters, arsenic, PAH, and PCB data. All analytical data as reported by the laboratories are presented in Appendix B. A summary of the field blank data and a comparison of field replicate data are discussed in Section 5.5. A summary of data validation findings for all chemistry analyses is included in Section 5.6; complete data validation reports are included in Appendix C. Finally, flow and precipitation data are presented in Section 5.7 and data correlation analyses are presented in Section 5.8.

5.1 Conventional Parameters

This section summarizes the conventional water quality parameters results. As discussed in Section 5.6, results for TOC and DOC analyses in baseflow samples are not included due to data quality issues that resulted in high bias. The cause of the TOC and DOC data quality issues was discovered and addressed prior to collection of the storm event samples (see Section 2.5); therefore, all TOC and DOC results for storm event samples are presented below.

5.1.1 Total Organic Carbon

TOC concentrations measured during storm event conditions are summarized in Table 7. Mean storm event TOC concentrations ranged from 2.40 mg/L at the Green River – Flaming Geyser location to 9.69 mg/L in Mill Creek. The highest TOC concentration was detected in Newaukum Creek (18.8 mg/L). In general, median storm event TOC concentrations were similar to mean concentrations. Storm event concentrations at both Green River locations were lower than most concentrations in the tributary locations (Figure 4). Figure 5 presents TOC concentrations by collection date and location.

Table 7. Summary of Storm Event TOC and DOC (mg/L) Data by Site.

Site	Parameter (mg/L)	Flow	FOD	Min	Max	Mean	Median
Green River – Flaming Geyser	TOC	Storm	6/6	1.48	4.73	2.40	1.93
	DOC		6/6	1.31	4.62	2.18	1.70
Newaukum Creek	TOC	Storm	6/6	4.69	18.8	8.73	7.57
	DOC		6/6	4.42	14.8	7.60	6.76
Soos Creek	TOC	Storm	6/6	3.91	8.44	5.43	4.85
	DOC		6/6	3.71	7.06	4.84	4.34
Mill Creek	TOC	Storm	6/6	8.68	10.7	9.69	9.61
	DOC		6/6	7.16	9.75	8.59	8.74
Black River	TOC	Storm	6/6	6.00	9.45	6.97	6.58
	DOC		6/6	4.97	8.68	6.23	5.67
Green River - Foster Links	TOC	Storm	6/6	2.68	7.01	3.84	3.29
	DOC		6/6	2.40	5.73	3.13	2.46

FOD – Frequency of detection.

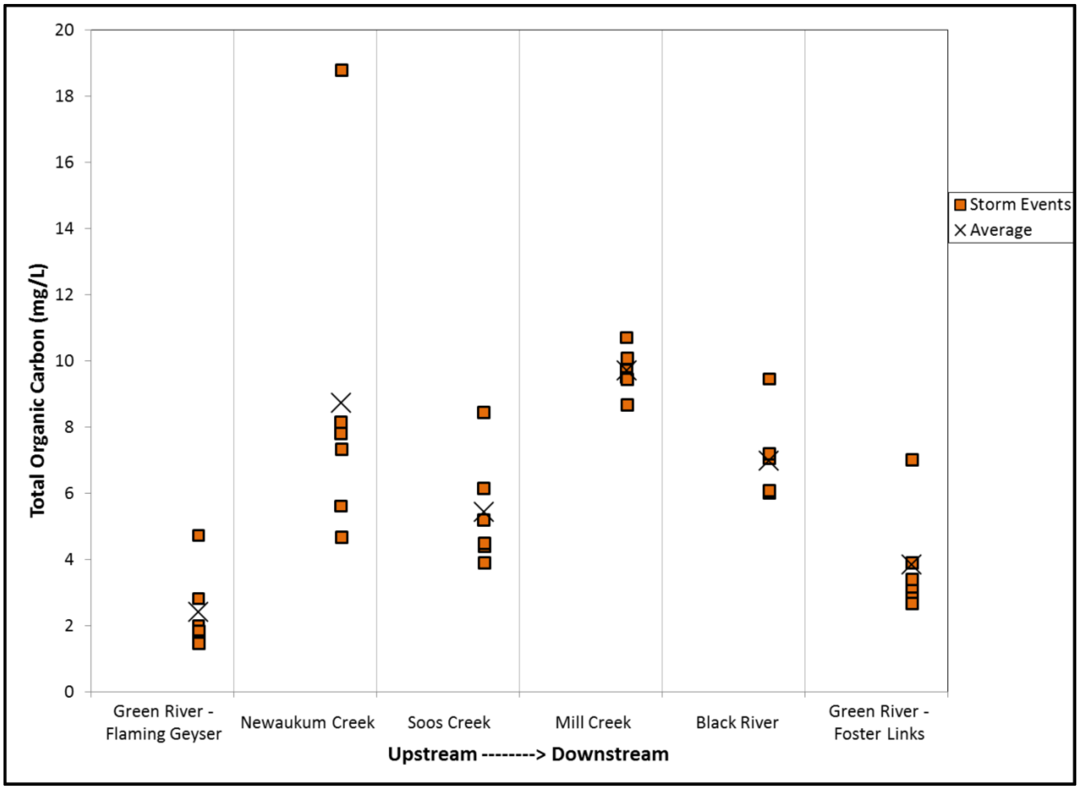


Figure 4. TOC by Site and Flow Condition

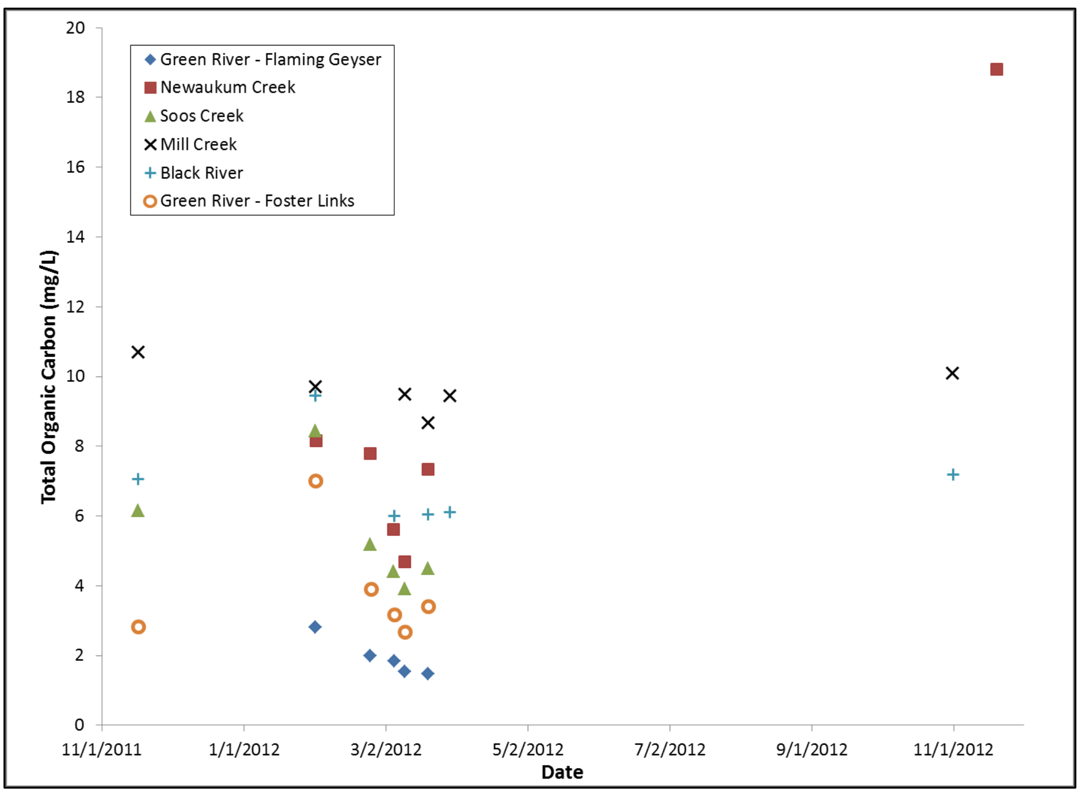


Figure 5. TOC by Sample Collection Date

5.1.2 Dissolved Organic Carbon

DOC concentrations measured in storm event samples are summarized in Table 7. Mean DOC concentrations during storm events ranged from 2.18 mg/L at the Green River – Flaming Geyser location to 8.59 mg/L in Mill Creek. The highest DOC concentration was detected in Newaukum Creek (14.8 mg/L). In general, median storm event DOC concentrations were similar to mean concentrations. As observed with TOC, most storm event DOC concentrations at both Green River locations were lower than levels measured in the tributaries (Figure 6). Figure 7 presents DOC concentrations by collection date and location.

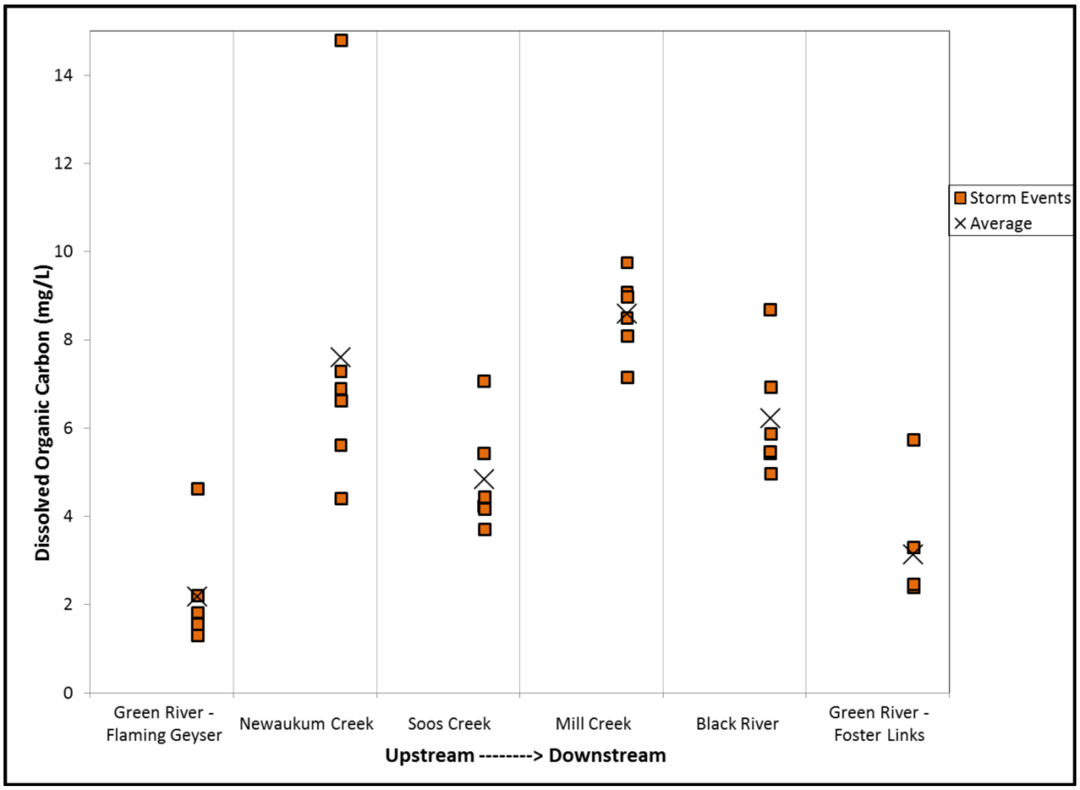


Figure 6. DOC by Site and Flow Condition

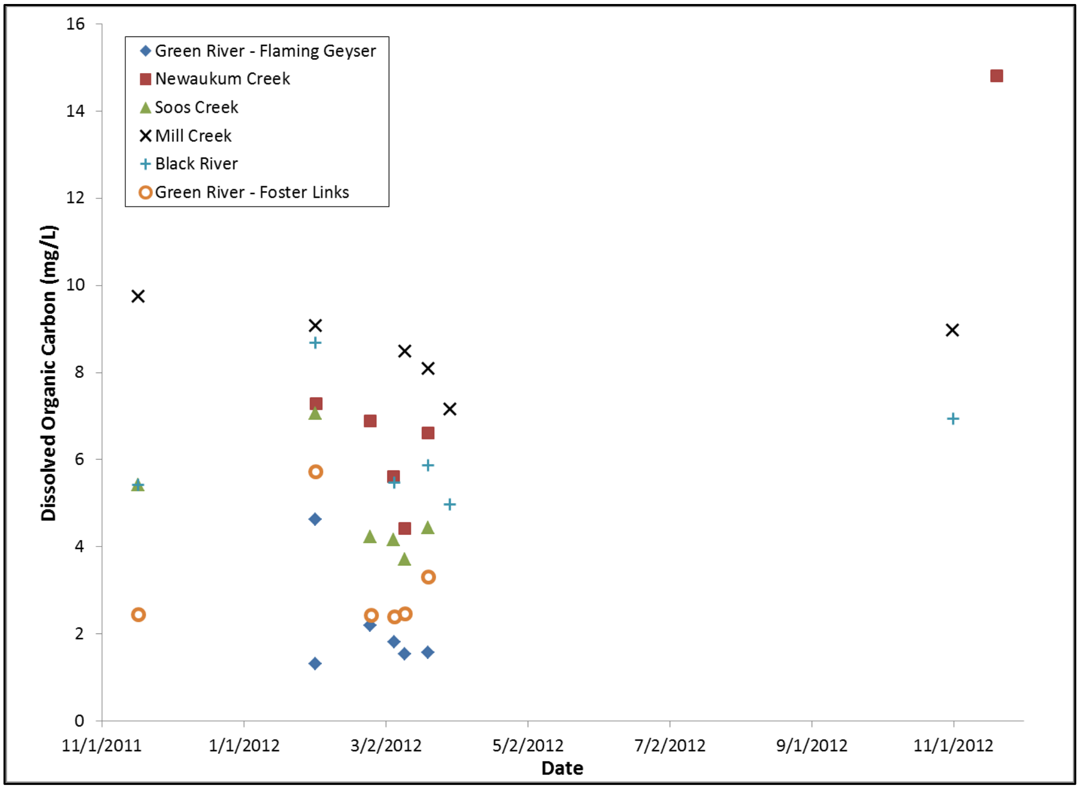


Figure 7. DOC by Sample Collection Date

5.1.3 Total Suspended Solids

TSS concentrations in both baseflow and storm event samples are summarized in Table 8. During baseflow conditions, mean TSS concentrations were generally similar across location and ranged from 1.78 mg/L in Newaukum Creek to 4.36 mg/L in the Black River. Mean TSS concentrations in storm event samples were higher than levels in baseflow samples and ranged from 6.09 mg/L in the Black River to 34.0 mg/L at the Green River – Foster Links location. The highest single TSS concentration in storm event samples was detected at the Green River – Foster Links location (102 mg/L). Median and mean baseflow concentrations were relatively similar at all locations. Median storm event concentrations were lower than mean storm concentrations at all locations except the Black River. With the exception of the Black River where TSS concentrations in baseflow and storm event samples were similar, TSS concentrations were usually higher in storm event samples (Figure 8). However, TSS concentrations in four of the storm event samples collected from the Green River – Flaming Geyser location were similar to concentrations in baseflow samples. The greatest variability in TSS was observed at the Green River - Foster Links location followed by Mill Creek (Figure 8). Figure 9 presents TSS concentrations by collection date and location.

Table 8. Summary of TSS (mg/L) Data by Site and Flow Condition

Site	Flow	FOD	Min	Max	Mean	Median
Green River – Flaming Geyser	Base	3/3	1.62	2.47	2.02	1.96
	Storm	6/6	1.30	52.8	12.2	2.21
Newaukum Creek	Base	3/3	1.65	1.90	1.78	1.80
	Storm	6/6	3.20	43.6	11.3	4.22
Soos Creek	Base	3/3	2.40	2.71	2.57	2.60
	Storm	6/6	4.00	18.4	7.48	5.82
Mill Creek	Base	3/3	3.78	4.40	3.99	3.78
	Storm	6/6	7.20	66.4	24.8	14.7
Black River	Base	3/3	4.20	4.63	4.36	4.24
	Storm	6/6	4.60	7.78	6.09	5.86
Green River - Foster Links	Base	3/3	2.89	4.95	3.93	3.96
	Storm	6/6	6.90	102	34.0	16.9

FOD – Frequency of detection.

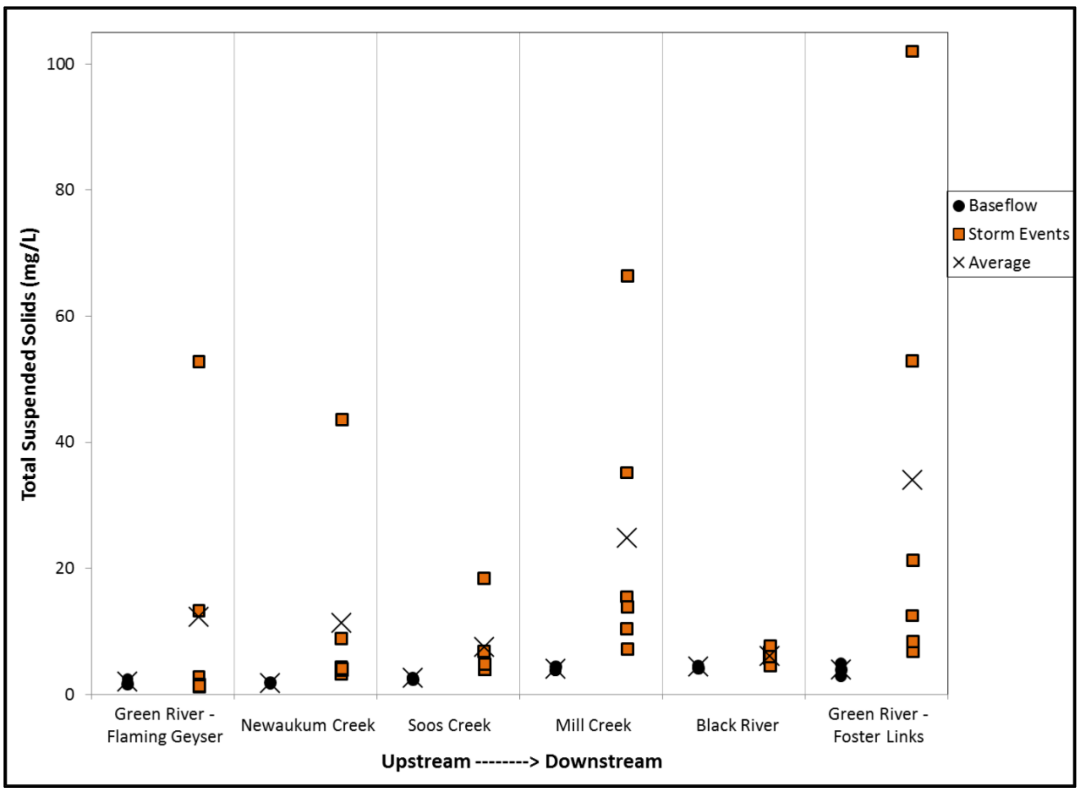


Figure 8. TSS by Site and Flow Condition

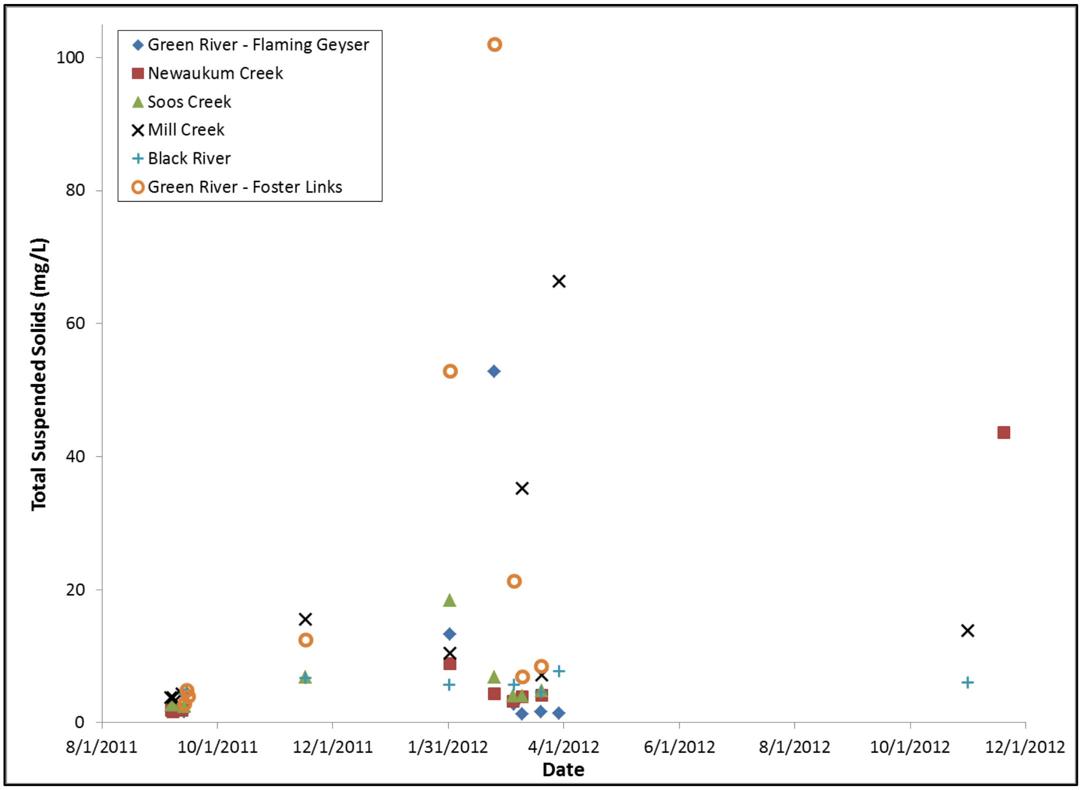


Figure 9. TSS by Sample Collection Date

5.2 Arsenic

Arsenic (total and dissolved) was detected in all samples; results are summarized separately for total and dissolved arsenic in the following sections.

5.2.1 Total Arsenic

A summary of total arsenic concentrations measured in both baseflow and storm event samples are presented in Table 9. During baseflow conditions, mean total arsenic concentrations ranged from 0.647 µg/L in Newaukum Creek to 1.05 µg/L in Soos Creek. Mean total arsenic concentrations during storm events ranged from 0.50 µg/L in Newaukum Creek to 1.05 µg/L in Mill Creek; the highest single concentration of total arsenic was detected at the Green River – Foster Links location (1.71 µg/L). During both baseflow and storm event conditions, mean and median total arsenic concentrations were similar at all locations with the exception of storm event samples collected from Mill Creek and the Green River-Foster Links location, where mean concentrations were slightly higher than median concentrations (Table 9).

At the three most upstream sites (Green River – Flaming Geyser, Newaukum and Soos creeks), mean total arsenic concentrations under baseflow conditions were higher than those detected during storm events (Table 9). When individual data from the three most upstream sites are compared, almost all sample results show total arsenic concentrations

lower during storm events than baseflow conditions (Figure 10). Mean total arsenic concentrations were similar during both baseflow conditions and storm events at the Green River – Foster Links location and the Black River, while levels are slightly higher during storm events than baseflow conditions in Mill Creek. In general, storm event concentrations were more variable than baseflow levels (Figure 10). Figure 11 presents total arsenic concentrations by collection date for each location.

Table 9. Summary of Total and Dissolved Arsenic (µg/L) Data by Site and Flow Condition

Site	Arsenic	Flow	FOD	Min	Max	Mean	Median
Green River – Flaming Geyser	Total	Base	3/3	0.765	0.871	0.804	0.775
		Storm	6/6	0.42 J	0.848	0.54 J	0.50 J
	Dissolved	Base	3/3	0.787	0.809	0.797	0.795
		Storm	6/6	0.30 J	0.511	0.42 J	0.43 J
Newaukum Creek	Total	Base	3/3	0.625	0.668	0.647	0.648
		Storm	6/6	0.42 J	0.668	0.50 J	0.48 J
	Dissolved	Base	3/3	0.636	0.651	0.641	0.636
		Storm	6/6	0.41 J	0.622	0.47 J	0.45 J
Soos Creek	Total	Base	3/3	0.998	1.08	1.05	1.08
		Storm	6/6	0.539	0.934	0.682	0.644
	Dissolved	Base	3/3	0.973	1.04	1.00	0.987
		Storm	6/6	0.47 J	0.777	0.58 J	0.541
Mill Creek	Total	Base	3/3	0.781	0.814	0.802	0.810
		Storm	6/6	0.855	1.48	1.05	0.887
	Dissolved	Base	3/3	0.704	0.733	0.714	0.706
		Storm	6/6	0.504	0.864	0.676	0.658
Black River	Total	Base	3/3	0.814	0.862	0.838	0.838
		Storm	6/6	0.760	0.974	0.868	0.845
	Dissolved	Base	3/3	0.47 J	0.501	0.49 J	0.49 J
		Storm	6/6	0.49 J	0.739	0.60 J	0.587
Green River – Foster Links	Total	Base	3/3	0.916	1.04	0.966	0.941
		Storm	6/6	0.591	1.71	0.964	0.794
	Dissolved	Base	3/3	0.692	0.728	0.709	0.706
		Storm	6/6	0.37 J	0.47 J	0.43 J	0.43 J

FOD – Frequency of detection; J – Value estimated.

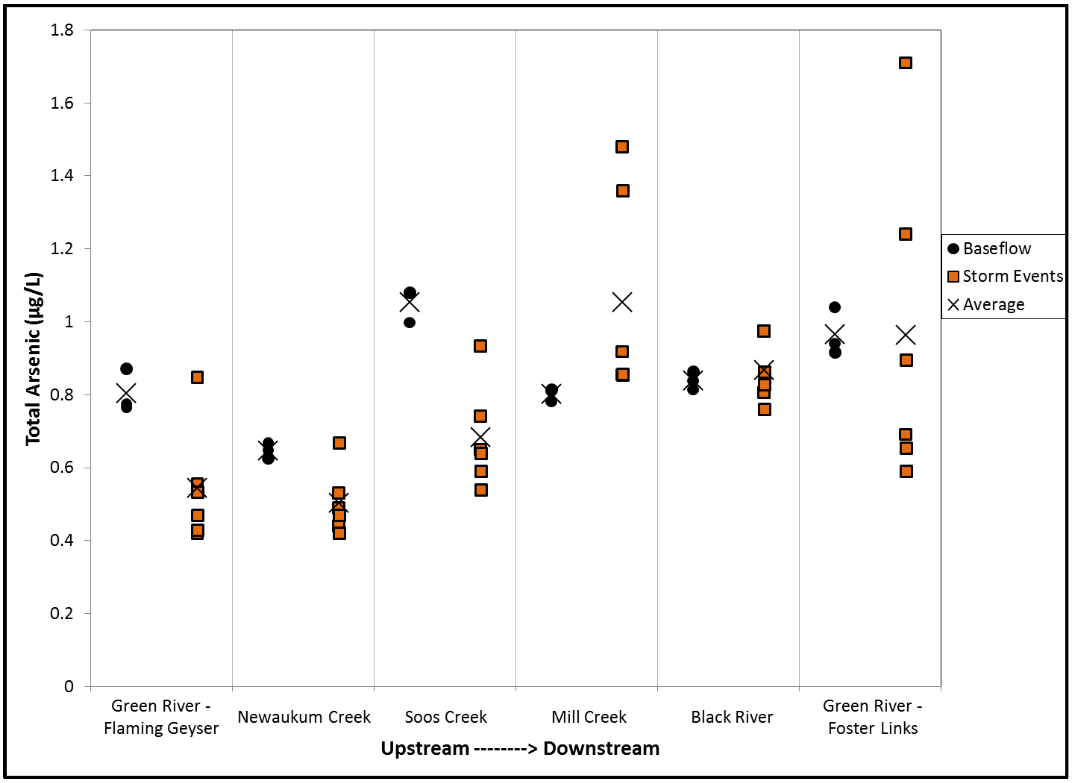


Figure 10. Total Arsenic by Site and Flow Condition

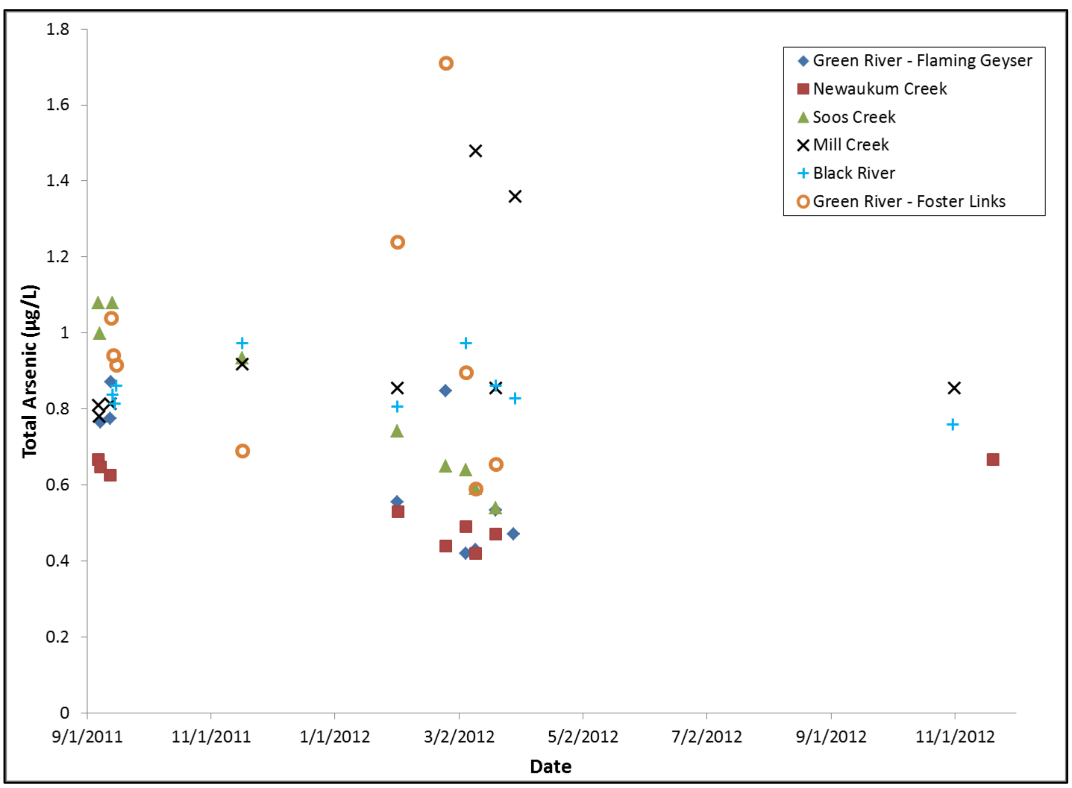


Figure 11. Total Arsenic by Sample Collection Date

5.2.2 Dissolved Arsenic

A summary of dissolved arsenic concentrations measured during both baseflow and storm event conditions are presented in Table 9. Mean dissolved arsenic concentrations during baseflow conditions ranged from 0.49 μg/L in the Black River to 1.00 μg/L in Soos Creek. During storm events, mean dissolved arsenic ranged from 0.42 μg/l at the Green River - Flaming Geyser location to 0.676 μg/l in Mill Creek. Mean and median dissolved arsenic concentrations were similar at all locations (Table 9).

With the exception of the Black River, mean dissolved arsenic concentrations were generally higher during baseflow conditions than during storm events. However, in Mill Creek, baseflow concentrations of dissolved arsenic fall within the range of those measured during storm events (Figure 12); baseflow concentrations in the Black River also overlapped with concentrations measured during two storm events. Figure 13 presents total arsenic concentrations by collection date for each location.

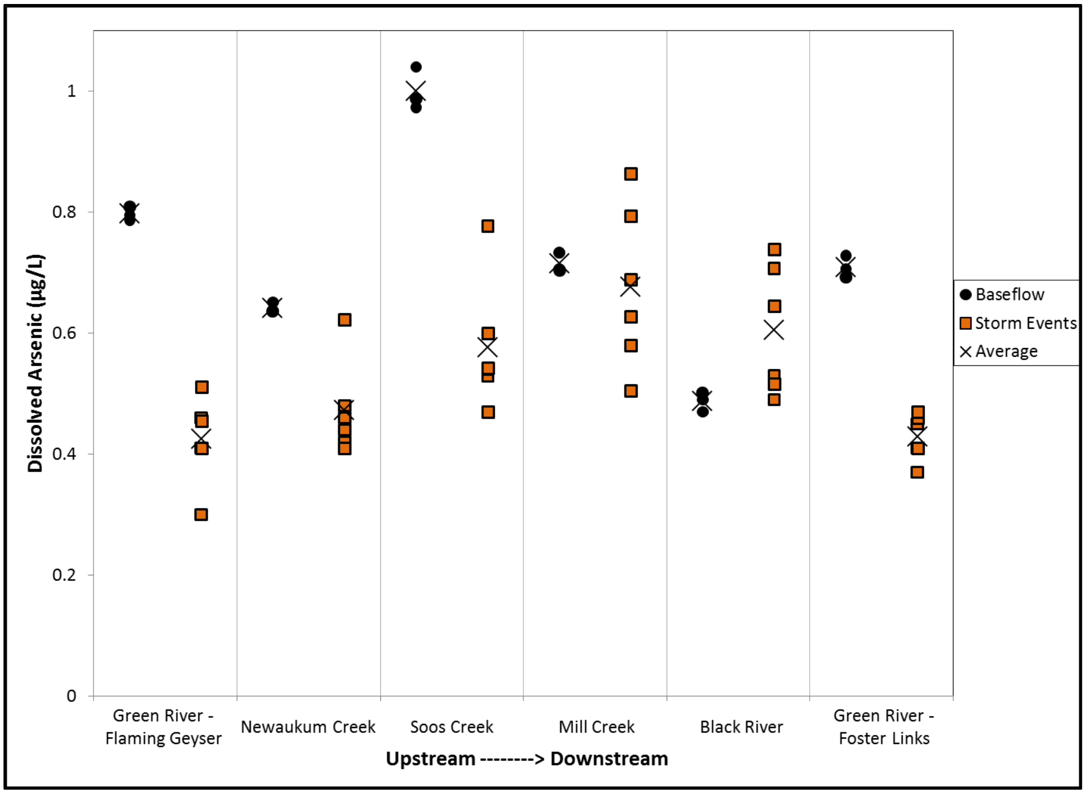


Figure 12. Dissolved Arsenic by Site and Flow Condition

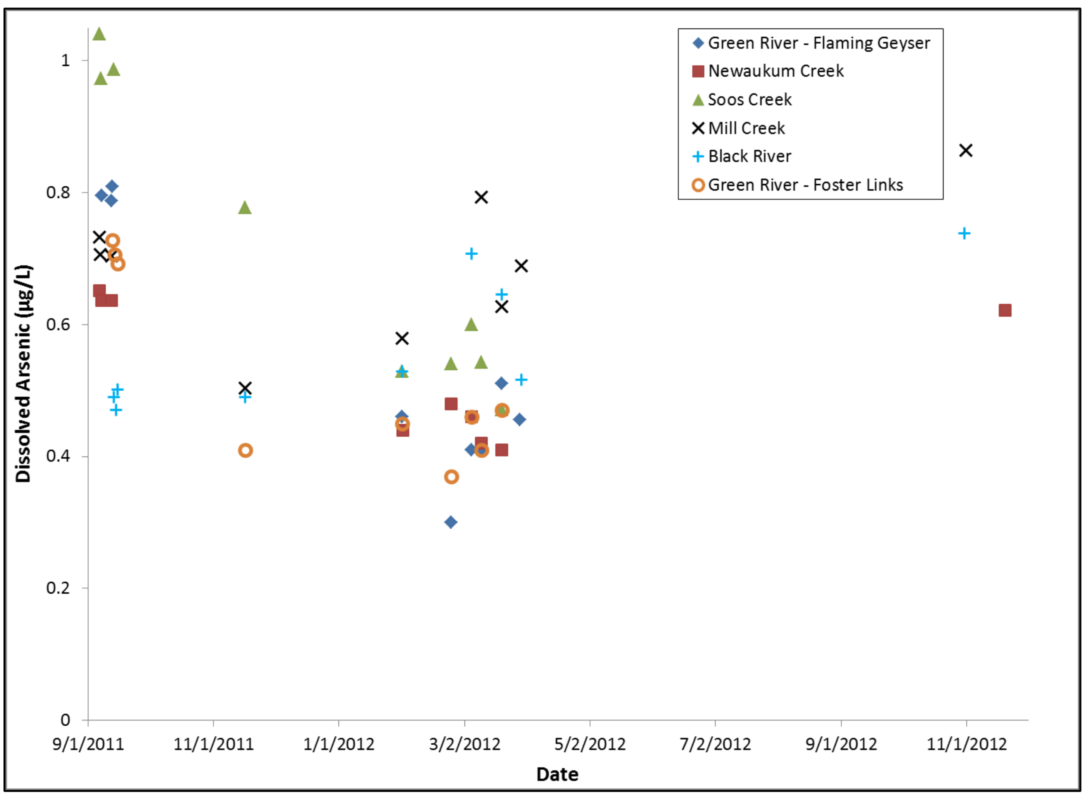


Figure 13. Dissolved Arsenic by Sample Collection Date

5.3 PAHs

PAH data are summarized as individual LPAH and HPAH compounds in tabular format for frequency of detection and graphical format for maximum detections. Total LPAHs and HPAHs are presented in tabular and graphical format. These data are discussed in the following sections.

5.3.1 LPAHs

The number of individual LPAHs detected in each sample was highly variable. With the exception of phenanthrene, which was never detected, all individual LPAHs were detected in at least one sample (Table 10). Individual LPAHs were detected more frequently during storm events than under baseflow conditions. The greatest number of individual PAHs was detected in the Black River, while the fewest individual PAHs were detected in the Green River –Flaming Geyser location. MDLs ranged from 0.00014 to 0.00095 μg/L depending on the PAH compound (see Appendix B). For most LPAH compounds, the highest detected concentrations during storm events were generally observed in the Black River. At all locations, naphthalene concentrations were highest of all individual LPAH compounds detected. Figure 14 illustrates maximum detected concentration of individual LPAHs by site and flow condition.

Table 10. Frequency of Detection for Individual LPAH Compounds by Site and Flow Condition

LPAH Compound	Green River - Flaming Geyser		Newaukum Creek		Soos Creek		Mill Creek		Black River		Green River - Foster Links	
	Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm
Acenaphthene	1/3	1/6	2/3	2/6	3/3	2/6	2/3	1/6	3/3	5/6	3/3	2/6
Acenaphthylene	2/3	1/6	0/3	4/6	3/3	6/6	3/3	5/6	3/3	6/6	3/3	4/6
Anthracene	0/3	0/6	0/3	3/6	0/3	6/6	2/3	6/6	3/3	6/6	1/3	6/6
Fluorene	1/3	1/6	2/3	2/6	2/3	2/6	2/3	1/6	3/3	4/6	0/3	2/6
Naphthalene	1/3	5/6	1/3	3/6	3/3	3/6	1/3	5/6	1/3	5/6	2/3	4/6
Phenanthrene	0/3	0/6	0/3	0/6	0/3	0/6	0/3	0/6	0/3	0/6	0/3	0/6

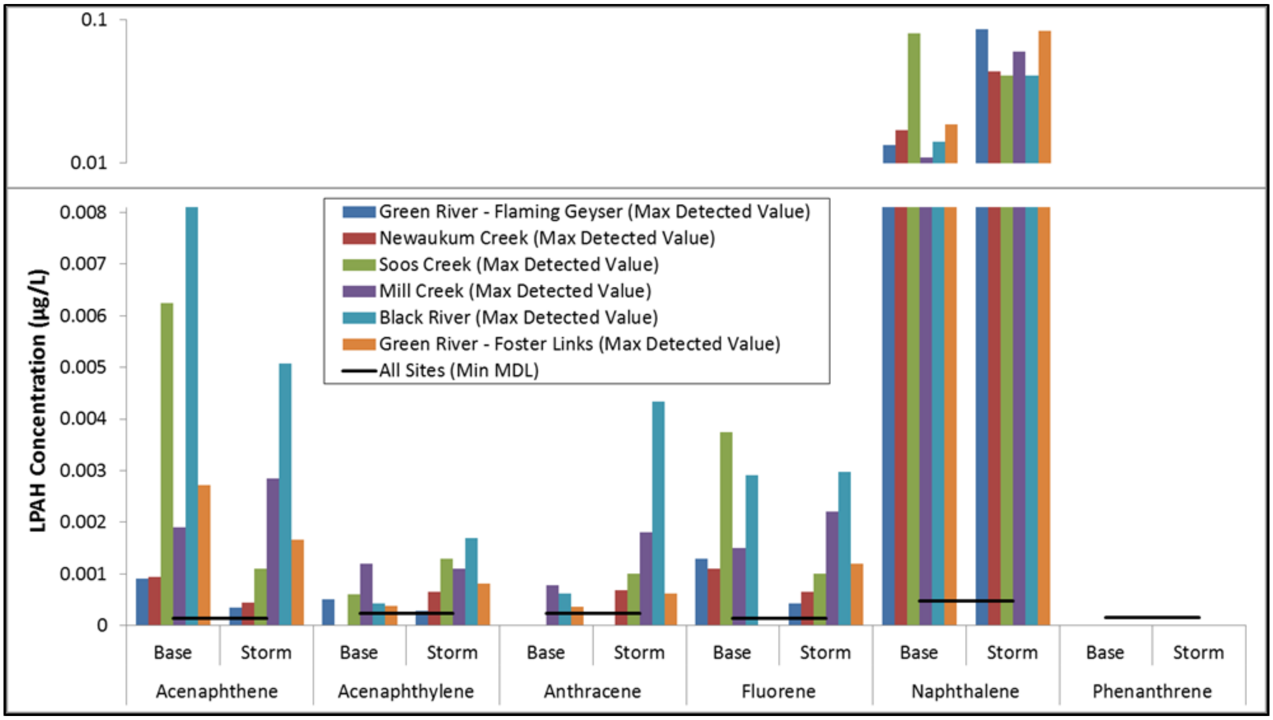


Figure 14. Maximum Detected Concentration of Individual LPAH Compounds by Site and Flow Condition

A summary of total LPAH concentrations is presented in Table 11. Under baseflow conditions, mean LPAH concentrations ranged from 0.0082 µg/L in Mill Creek to 0.0535 µg/L in Soos Creek. The highest overall LPAH concentration was detected under baseflow conditions in Soos Creek (0.101 µg/L). Mean storm event LPAH concentrations ranged from 0.0244 µg/L in Newaukum Creek to 0.051 µg/L in Mill Creek. In general, median storm event LPAH concentrations were similar to, or slightly lower than, the mean concentrations. With the exception of the Green River –Foster Links location, a similar pattern was observed under baseflow conditions at all locations (the median was not calculated for the Green River – Flaming Geyser location because LPAH compounds were only detected in two of the three baseflow samples).

In general, LPAH concentrations were variable under both baseflow and storm event conditions at all locations (Figure 15). This variability is in part, likely related to the low frequency of detection and low detected concentrations; relatively small differences in concentration can appear as relatively high variability between samples. With the exception of Soos Creek, mean storm event concentrations were higher than those observed during baseflow conditions; however, baseflow concentrations fall within the range of those detected in storm event samples for all locations (Figure 15). Figure 16 summarizes total LPAH concentrations by collection date for each location.

Table 11. Summary of Total LPAHs (µg/L) Data by Site and Flow Condition

Site	Flow	FOD	Min	Max	Mean[a]	Median[a]
Green River – Flaming Geyser	Base	2/3	0.00025 J	0.0238 J	0.010 J	n/c
	Storm	5/6	0.0212 J	0.0945 J	0.0475 J	0.0473 J
Newaukum Creek	Base	3/3	0.00193 J	0.0308	0.0116 J	0.00204 J
	Storm	5/6	0.00069 J	0.0688 J	0.024 J	0.0125 J
Soos Creek	Base	3/3	0.0163 J	0.101 J	0.0535 J	0.0435 J
	Storm	6/6	0.00099 J	0.0663 J	0.030 J	0.0244 J
Mill Creek	Base	3/3	0.0042 J	0.0150 J	0.00820 J	0.00538 J
	Storm	6/6	0.00708 J	0.0821 J	0.0512 J	0.0537 J
Black River	Base	3/3	0.0111 J	0.0347 J	0.0192 J	0.0118 J
	Storm	6/6	0.00516 J	0.0728 J	0.0368 J	0.0374 J
Green River – Foster Links	Base	3/3	0.00287 J	0.0375 J	0.0253 J	0.0356 J
	Storm	6/6	0.00036 J	0.0941 J	0.034 J	0.0235 J

[a] Mean and median concentrations were calculated with detected concentrations and the MDL for non-detect results. Total LPAHs represent the sum of detected individual PAH concentrations. If no individual LPAHs were detected in a given sample, the highest non-detect value (U-flagged) was used.

FOD – Frequency of detection; n/d – Non-detect; n/c – Not calculated if FOD less than 3/6.
J – Value estimated.

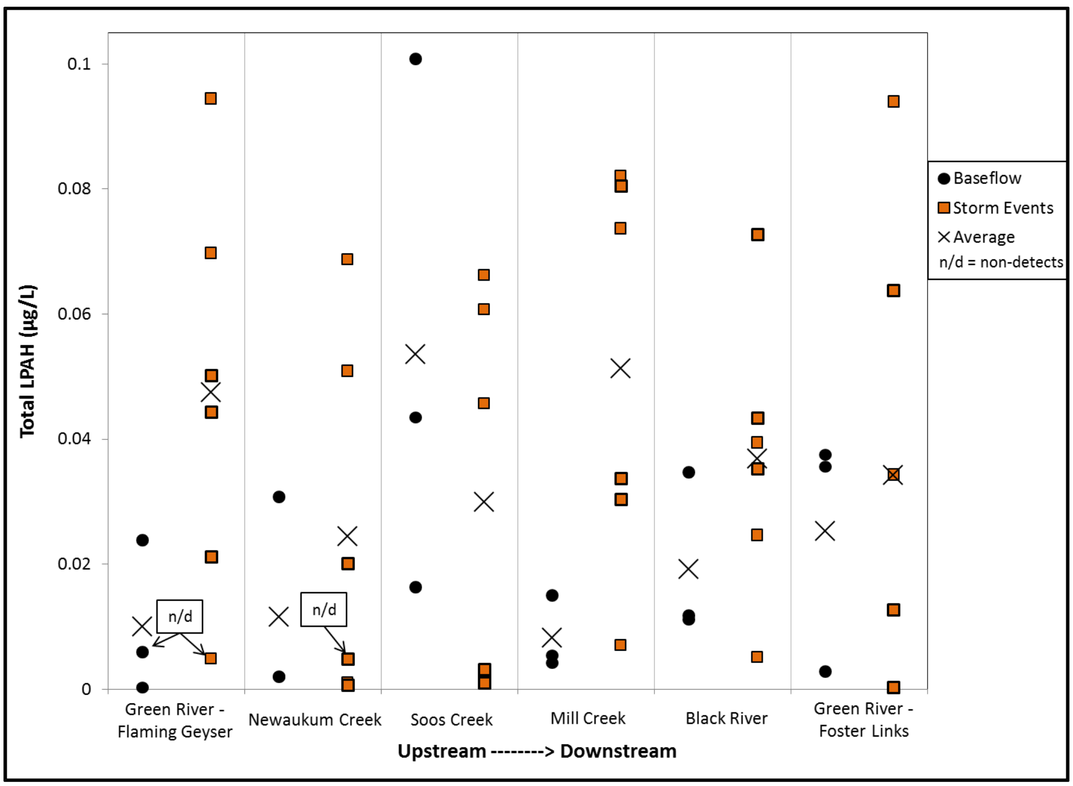


Figure 15. Total LPAHs by Site and Flow Condition

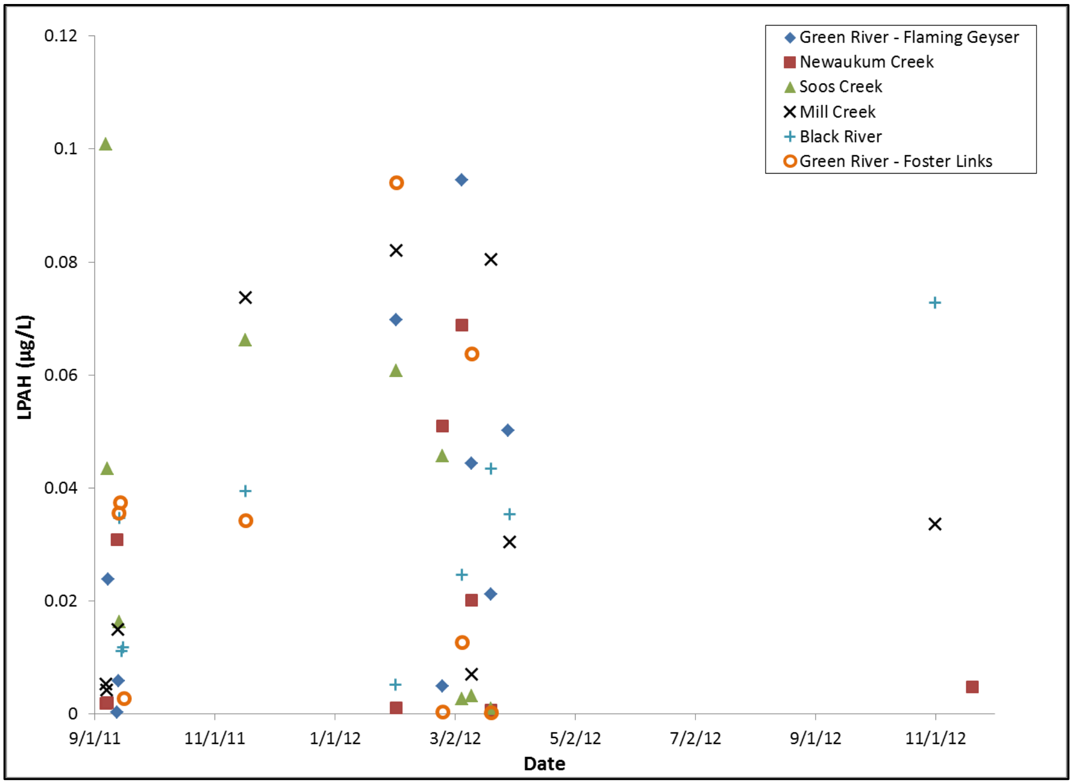


Figure 16. Total LPAHs by Sample Collection Date

5.3.2 HPAHs

All individual HPAHs were detected in at least one sample. The number of individual HPAHs detected in each sample was variable; however, the frequency of detection was low in most samples (Table 12). Individual HPAHs were detected more frequently in storm event samples than in baseflow samples. The greatest number of individual HPAHs was detected in the Black River, while the least number of detections was found in the Green River –Flaming Geyser location. MDLs ranged from 0.00016 to 0.00095 µg/L depending on the PAH compound (see Appendix B). For all HPAH compounds, the highest detected concentrations were observed in the Black River. Figure 17 illustrates maximum detected concentration of individual HPAHs by site and flow condition.

Table 12. Frequency of Detection for Individual HPAH Compounds by Site and Flow Condition

HPAH Compound	Green River - Flaming Geyser		Newaukum Creek		Soos Creek		Mill Creek		Black River		Green River - Foster Links	
	Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm
Benzo(a)-anthracene	0/3	0/6	0/3	1/6	0/3	2/6	0/3	6/6	3/3	6/6	0/3	5/6
Benzo(a)pyrene	0/3	0/6	0/3	1/6	0/3	0/6	0/3	6/6	2/3	6/6	0/3	5/6
Benzo(b,j,k)-fluoranthene	0/3	0/6	0/3	4/6	0/3	3/6	1/3	6/6	3/3	6/6	1/3	6/6
Benzo(g,h,i)-perylene	0/3	1/6	0/3	1/6	0/3	2/6	1/3	6/6	3/3	6/6	0/3	6/6
Chrysene	0/3	2/6	0/3	4/6	0/3	6/6	2/3	6/6	3/3	6/6	1/3	6/6
Dibenzo(a,h)-anthrancene	0/3	0/6	0/3	0/6	0/3	0/6	0/3	1/6	0/3	6/6	0/3	1/6
Fluoranthene	0/3	0/6	0/3	0/6	0/3	0/6	0/3	1/6	0/3	6/6	0/3	1/6
Indeno(1,2,3-Cd)-pyrene	0/3	1/6	0/3	1/6	0/3	2/6	1/3	6/6	2/3	6/6	0/3	6/6
Pyrene	0/3	0/6	0/3	0/6	0/3	0/6	0/3	3/6	3/3	6/6	0/3	1/6

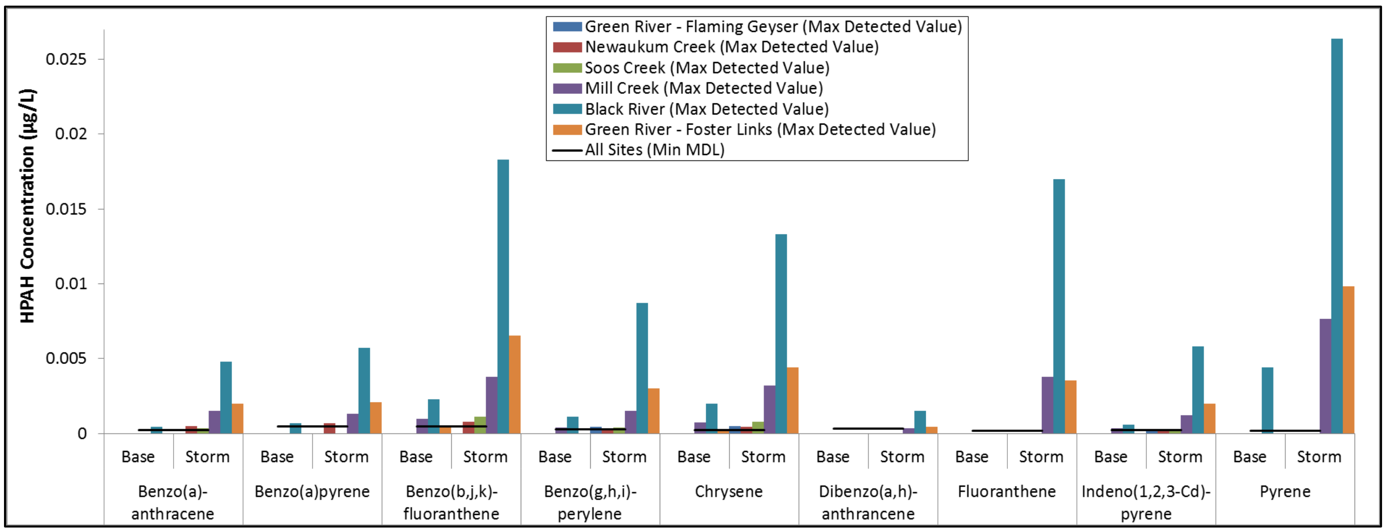


Figure 17. Maximum Detected Concentration of Individual HPAH Compounds by Site and Flow Condition

Total HPAH concentrations in both baseflow and storm event samples are summarized in Table 13. During baseflow conditions, HPAHs were not detected in samples from the three most upstream sites (Green River – Flaming Geyser, Newaukum and Soos creeks). The highest mean HPAH concentration during baseflow conditions was detected in the Black River (0.0101 µg/L); this concentration is about an order of magnitude greater than the mean concentrations at Mill Creek and the Green River-Foster Links location. HPAHs were detected in most storm event samples. The highest mean HPAH concentration in a storm event sample was detected in the Black River (0.065 µg/L). Mean storm event concentrations in the Black River, Mill Creek and Green River-Foster Links location were at least an order of magnitude higher than mean concentrations in the Green River-Flaming Geyser location, and Newaukum and Soos creeks. In general, median storm event HPAH concentrations were similar to mean concentrations except at the Green River-Foster Links location and Mill Creek where median concentrations were lower (Table 13).

All HPAH concentrations during storm events were higher than those during baseflow conditions in Mill Creek, the Black River and the Green River-Foster Links location (Figure 18). While HPAHs were not detected in baseflow samples from the Green River-Flaming Geyser location and Newaukum and Soos creeks, at least one HPAH was detected in most storm event samples collected from Newaukum and Soos creeks. Figure 19 presents total HPAH concentrations by collection date and location.

Table 13. Summary of Total HPAHs (µg/L) Data by Site and Flow Condition

Site	Flow	FOD	Min	Max	Mean[a]	Median[a]
Green River – Flaming Geyser	Base	0/3	n/d	n/d	0.0021 U	n/c
	Storm	2/6	0.00029 J	0.00121 J	0.0014J	n/c
Newaukum Creek	Base	0/3	n/d	n/d	0.0026 U	n/c
	Storm	5/6	0.00090 J	0.00165 J	0.0013 J	0.00122 J
Soos Creek	Base	0/3	n/d	n/d	0.0027 U	n/c
	Storm	6/6	0.00035 J	0.0022 J	0.0012 J	0.0011 J
Mill Creek	Base	2/3	0.00052 J	0.0025 J	0.0021 J	n/c
	Storm	6/6	0.00556 J	0.0191 J	0.0115 J	0.0106 J
Black River	Base	3/3	0.0094 J	0.0109 J	0.0101 J	0.0100 J
	Storm	6/6	0.0388 J	0.102 J	0.0651 J	0.0656 J
Green River – Foster Links	Base	1/3	n/d	0.00076 J	0.0013 J	n/c
	Storm	6/6	0.00377 J	0.0303 J	0.0110 J	0.00775 J

[a] Mean and median concentrations were calculated with detected concentrations and the MDL for non-detect results. Total HPAHs represent the sum of detected individual PAH concentrations. If no individual HPAHs were detected in a given sample, the highest non-detect value (U-flagged) was used.

FOD – Frequency of detection; n/d – Non-detect; n/c – Not calculated if FOD less than 3/6; J – Value estimated

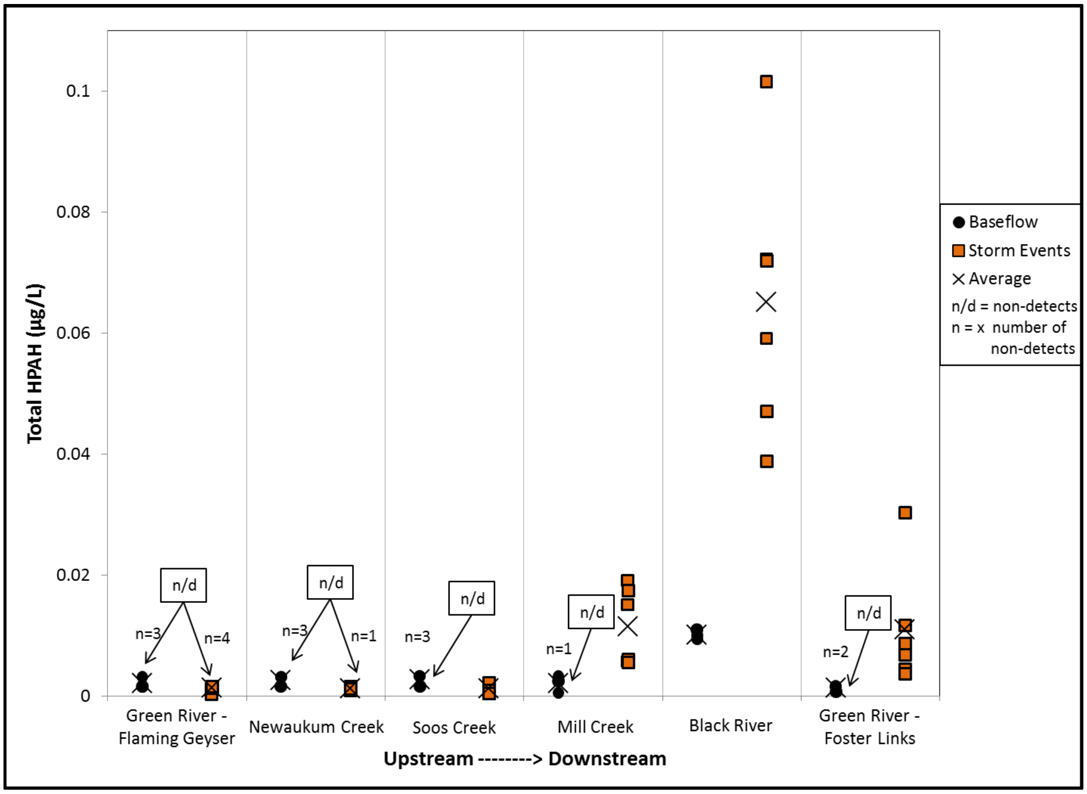


Figure 18. Total HPAHs by Site and Flow Condition

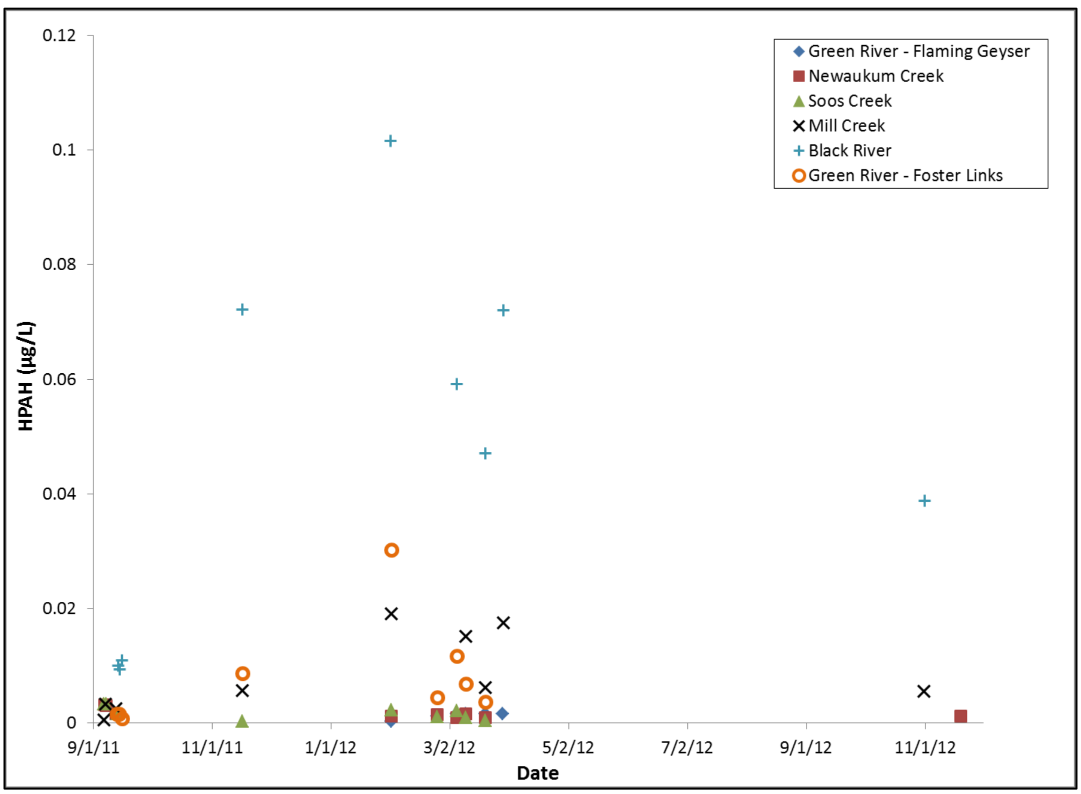


Figure 19. Total HPAHs by Sample Collection Date

5.4 Total PCBs

Total PCB concentrations during both baseflow and storm event conditions are summarized in Table 14[6]. PCBs were detected in all baseflow and storm event samples. During baseflow conditions, mean total PCB concentrations ranged from 79.8 pg/L at the Green River – Flaming Geyser location to 1,590 pg/L in Soos Creek. During baseflow conditions, the highest single total PCB concentration was detected in Soos Creek (4,680 pg/L). All other total PCB baseflow concentrations were about an order of magnitude or less than this concentration. For example, the second highest baseflow concentration of 452 pg/L was measured in Newaukum Creek. Mean total PCB concentrations in storm event samples ranged from 84.1 pg/L at the Green River – Flaming Geyser location to 940 pg/L in the Black River. Median storm event concentrations were lower than mean storm concentrations at all sampling locations. Under baseflow conditions, median concentrations were also lower than mean concentrations at all locations except Mill Creek and the Green River - Foster Links location, but concentrations were similar. The greatest difference between baseflow concentrations was observed at Soos Creek where the total PCBs in one sample were over 100 times higher than the next highest baseflow concentration. With the exception of Soos and Newaukum creeks, mean storm event total PCB concentrations at all locations were similar or higher than those during baseflow conditions. However, baseflow concentrations generally fall within the range of levels detected during storm events (Figure 20). Figure 21 presents total PCB concentrations by collection date and location.

Table 14. Summary of Total PCB (pg/L) Data by Site and Flow Condition

Site	Flow	FOD	Min	Max	Mean	Median
Green River – Flaming Geyser	Base	3/3	37.8 J	142 J	79.8 J	59.4 J
	Storm	6/6	23.0 J	171 J	84.1 J	80.6 J
Newaukum Creek	Base	3/3	35.4 J	452 J	177 J	45.3 J
	Storm	6/6	39.1 J	205 J	87.8 J	72.4 J
Soos Creek	Base	3/3	41.4 J	4,680 J	1,590 J	45.0 J
	Storm	6/6	36.2 J	160 J	93.3 J	88.4 J
Mill Creek	Base	3/3	91.0 J	121 J	110 J	118 J
	Storm	6/6	72.2 J	486 J	278 J	223 J
Black River	Base	3/3	137 J	423 J	261 J	222 J
	Storm	6/6	319 J	2133 J	940 J	756 J
Green River – Foster Links	Base	3/3	56.3 J	106 J	84.9 J	92.8 J
	Storm	6/6	74.4 J	316 J	161 J	119 J

FOD – Frequency of detection; J – Value estimated.

[6] See Section 5.5.1 and 5.6.2 for a description of additional PCB congeners not included in total PCB calculations due to equipment blank contamination concerns.

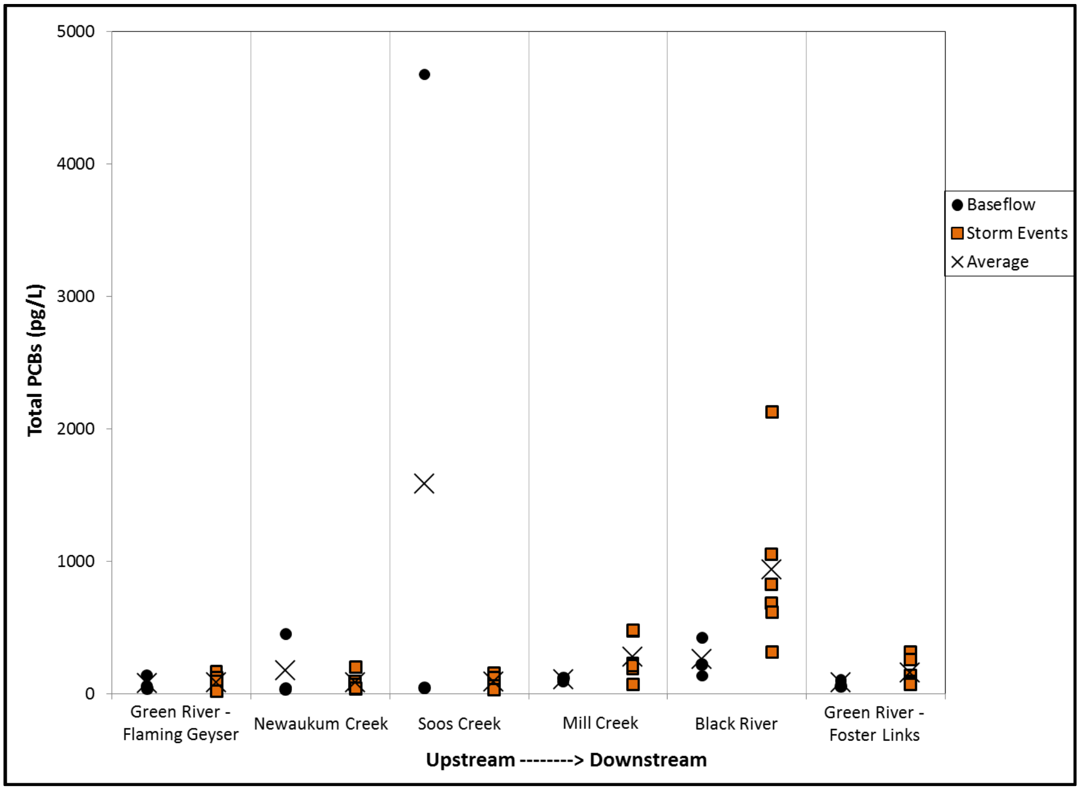


Figure 20. Total PCBs by Site and Flow Condition

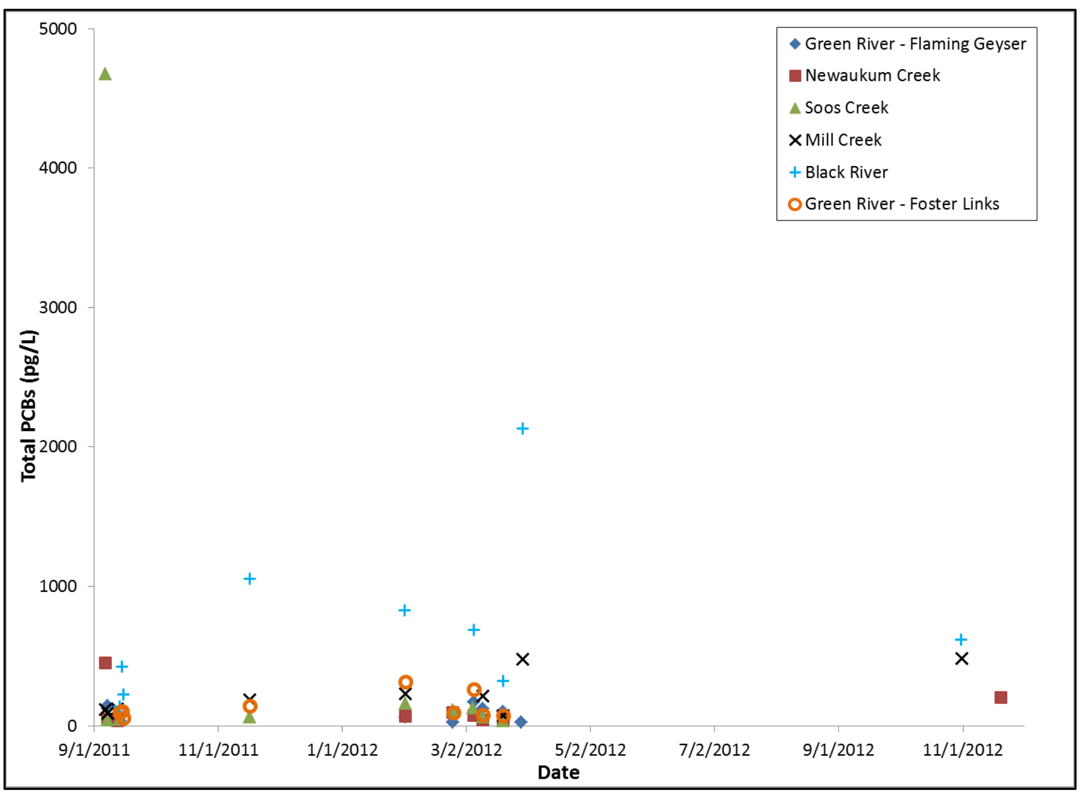


Figure 21. Total PCBs by Sample Collection Date

5.5 Quality Control/ Quality Assurance Samples

This section presents the results for field blank and field replicates for arsenic, total LPAHs and HPAHs, total PCBs and conventional parameters. Results for all parameters are summarized in Appendix B.

5.5.1 Field Blank

Field blank samples provide an indication of potential chemical contamination associated with field equipment. They can help detect false positives or biased high results by identifying if chemical contamination is associated with sampling and storage equipment. Table 15 presents the field blank results. Arsenic, HPAHs and TSS were not detected in these samples; LPAHs were detected at very low levels. The same LPAH compounds detected in the field blank were also detected in laboratory method blank samples.

Total PCBs in the single field blank sample were at 155 pg/L. PCBs were also detected in laboratory method blank samples at concentrations ranging from 33 to 91 pg/L. The laboratory method blank associated with the field blank sample had a total PCB concentration of 33 pg/L. For another King County study (King County 2013b) the KCEL reverse-osmosis water, which is used for field blanks in this study, was analyzed for PCB congeners and had a total PCB concentration of 31.8 pg/L. When analyzing PCBs at such low detection levels, it is not uncommon to detect low levels of PCB contamination in laboratory method blanks. However, the field blank still exceeded these method blank and reverse-osmosis water sample results. Upon further review, the three coeluting congener groups with the highest detected concentrations in the field blank include the congeners indicative of contamination from silicone tubing (i.e., PCB-47, PCB-51, and PCB-68); these comprised approximately 70% of the total PCBs. The remaining PCB total is similar to that observed in laboratory water used to generate the field blank. The field blank results and subsequent research (King County 2018) confirmed that the silicone tubing used in the autosampler influenced total PCB concentrations in study samples. The PCB totals presented in this study were adjusted to exclude the PCB congeners associated with the silicone tubing used in sample collection and processing (Section 1.0).

TOC and DOC were detected at low levels in the field blank. These levels were similar to minimum concentrations detected at the Green River Flaming Geyser location. While only one field blank sample was analyzed, these results suggest a potential bias to samples; however, for most sample results the bias is not likely to be significant.

Table 15. Summary of Field Blank Results

Dissolved Arsenic	Total Arsenic	Total HPAHs	Total LPAHs	Total PCBs	TOC	DOC	TSS
µg/L				pg/L	mg/L		
n/d (0.1)	n/d (0.1)	n/d (0.00047)[a]	0.0434 J	155[b] J	1.14	1.03	n/d (0.5)

n/d – Non-detect; Method Detection Limit (MDL) in parentheses; J - Value estimated.

[a] Represents the highest MDL for individual HPAH compound.

[b] Coeluting congener groups PCB-44/47/65. PCB-45/51, and PCB-68 comprised 108 pg/L of this total.

5.5.2 Field Replicates

Field replicate samples provide an indication of natural and analytical variability. As previously discussed, two field replicates (Green River – Flaming Geyser and Black River) were collected over the course of the sampling period. Table 16 summarizes the comparison of the field replicate samples.

Table 16. Comparison of field replicate results

Parameter	Green River – Flaming Geyser			Black River		
	Sample	Replicate	RPD	Sample	Replicate	RPD
Total As (µg/L)	0.47 J	0.47 J	0%	0.770	0.750	3%
Dissolved As (µg/L)	0.45 J	0.46 J	2%	0.742	0.735	1%
LPAHs (µg/L)	0.0560	0.0444	23%	0.117 J	0.0285 J	122%
HPAHs (µg/L)	0.0017 U	0.0017 U	0%	0.0396 J	0.0380 J	4%
Total PCBs (pg/L)	34.0 J	12.0 J	96%	656 J	582 J	12%
TOC (mg/L)	1.51	1.45	4%	7.50	6.89	8%
DOC (mg/L)	1.24	1.38	11%	7.00	6.88	2%
TSS (mg/L)	1.24	1.65	28%	6.00	6.02	0%

RPD – Relative percent difference; U – Non-detect; J - Value estimated.

The relative percent differences (RPDs) between parameter concentrations in field replicates were variable. The greatest differences were observed for LPAHs in the Black River (RPD = 122 %). With the exception of LPAHs in the Black River and total PCBs and TSS at the Green River - Flaming Geyser location, RPDs for field replicate samples were below the required RPD for laboratory duplicate samples as described in the SAP (King County 2011a). The relatively high RPD for LPAHs in the Black River samples is driven by a higher detected concentration of naphthalene in the replicate sample. Total PCBs in the Green River – Flaming Geyser samples were very low, which influenced the RPD result. Overall, there were very few PCB congener detections in either sample, and those that were detected were flagged as estimates. The RPD for TSS of 28% in the Green River - Flaming Geyser location replicate is just above the laboratory duplicate requirement of 25%. With the exception of LPAHs in one field replicate pair, the field replicates indicate relatively low variability between the primary sample and field replicate. However, this is based on a limited number of field replicates at only two sampling locations.

5.6 Chemistry Data Validation

Arsenic, PAH and conventional data were validated by King County using EPA National Functional Guidelines for Superfund data (EPA 2008 and 2010b) and the study SAP. Details of this validation are described in a data validation technical memorandum (Appendix C). Validation of PCB congener data was completed by Laboratory Data Consultants, Inc. (LDC) in accordance with EPA Superfund guidance (EPA 2009). PCB congener validation reports are provided in Appendix C. This section summarizes the major findings of the chemistry data validations.

5.6.1 Arsenic, PAHs and Conventional Parameters

KCEL reviewed the arsenic, PAHs and conventional parameter data by comparing the results to reference methods and SAP requirements, and flagging data with laboratory qualifiers where appropriate. Validation of these data was conducted by Water and Land Resources Division Science Unit staff. The validation process included review of the data anomaly forms, batch reports and analytical quality control (QC) reports. The following QC parameters were also reviewed: holding time, method blanks, spike blanks and duplicates, matrix spikes and duplicates, laboratory duplicates and surrogates.

Most QC specifications were met and, therefore, many analytes did not require qualifiers. However, some analytes were qualified with a J, indicating an estimated value. Data validation resulted in rejecting the TOC and DOC baseflow samples for the reasons discussed below. All analytical data except those rejected are of acceptable quality based on the data validation findings. Issues that resulted in the qualification of data are summarized below.

The analytical method for dissolved arsenic requires that samples be filtered within the method-specified 15 minute-holding time. Due to the travel time from the sampling site to the KCEL, it was not feasible to filter samples within the 15-minute holding time. As a result, all dissolved arsenic analyses were qualified with a “J” flag and considered estimated with an unknown bias.

The initial version of the SAP specified that all sample tubing and collection carboys be decontaminated by rinsing with acetone prior to each use. Following collection of the baseflow samples, it was determined that the TOC and DOC analyses were biased high as a result of residual acetone in the silicon tubing. When equipment blanks were tested, it was determined that the acetone was the cause of false positives in the TOC and DOC analyses. As a result, the TOC and DOC data for the baseflow samples were rejected (R qualified) by the data validator. None of the TOC and DOC analyses in storm event samples were impacted because the acetone rinse was discontinued prior to their collection. Following this finding, the SAP was updated to reflect the change in decontamination procedures.

Between 5 and 12 PAH compounds were detected in each method blank associated with the data presented in this report. All PAH method blank results were detected at concentrations less than the reporting detection limit (RDL), which is the limit of practical quantitation. Therefore, current EPA guidance (EPA 2008) rules were applied by the validator and results where the sample concentration was greater than the RDL and greater than 10 times the method blank concentration remained unqualified. When the detected method blank and sample concentrations were less than the RDL, the sample result was changed to the numeric RDL value and received a “U” validation qualifier. When method blank concentrations were detected and less that the RDL and the sample concentration was greater than the RDL, but less than 10 times the method blank concentration, the sample result remained as reported but received a “U” validation qualifier. Sample results were treated as not detected when “U” validation qualifiers are applied.

Individual PAH compounds in multiple samples were qualified for one of the following reasons: spike blank recoveries and RPDs were outside of QC limits, laboratory duplicates

exceeded QC limits, and in some cases, matrix spike recovery limits were not met. Samples were qualified with a "J" flag and considered estimated with either low or high bias. The most frequently qualified PAH was naphthalene, which was "J" flagged in 28 storm event samples because of high RPDs in laboratory duplicates.

5.6.2 PCBs

PCB data were validated to Level III by LDC. Level III validation includes verification of custody, holding times, reporting limits, sample QC and QC acceptance criteria, frequency of QC samples, instrument performance checks, along with initial and routine calibration checks.

Holding time, initial and continuing calibrations and other instrument performance checks were all within method criteria. Internal standards experienced low recovery in one sample and a few samples experienced sample-sample duplicate relative significant differences outside of method specifications. These method deviations resulted in some congener detections being flagged as estimated (J qualified).

PCBs were detected in all method blank samples. One or more mono- or di-chlorinated PCB congener were detected in the method blanks. Several method blanks had detections across the entire PCB homolog range. Between 17 and 33 PCB congeners were detected in the methods blanks. The total PCBs detected in method blanks ranged from 33.9 to 91.2 pg/L. Environmental sample detections were qualified as non-detect by the contract validator whenever congener concentrations were less than five times the method blank concentration. The "5x rule" reduces the potential for false positives, but raises opportunities for false negatives. This potentially resulted in some low bias for congeners detected above the method blank concentration but below five times the method blank.

Numerous PCB congeners were qualified by the analytical laboratory as "K" which means that not all identification and qualification criteria were met for these compounds. The maximum potential concentration is reported for "K" flagged congeners. These analytes were qualified by the validator as non-detects (U qualified) according to the EPA Region 10 validation requirements.

An "R1" qualifier (data rejected) was added post-validation to identify coeluting congener groups that were heavily influenced by silicone tubing equipment contamination and excluded from total PCB calculations (i.e., PCB-44/47/65, PCB-45/51, and PCB-68) (King County 2018).

5.7 Precipitation and Flow

As previously discussed, precipitation and flow data were collected during each sampling event. This section presents precipitation and flow data associated with the sampling periods.

5.7.1 Precipitation

Precipitation data are summarized (as total inches) in Table 17 including precipitation measurements for both the sampling period and the 12 hours preceding initiation of the

sampling event. Precipitation occurring prior to sample initiation may influence flow conditions during sample collection. Baseflow samples were collected during the dry season; therefore, precipitation is only reported for storm event sampling periods. With the exception of one event at Mill Creek (1/31/2012), total precipitation exceeded 0.25 inches of rainfall (Table 17). The rainfall totals for Mill Creek on 1/31/2012 are much lower than other locations sampled on this day because the sampler collected samples for less than 2 hours rather than the 12 hour minimum. As previously noted in Section 2.3.2, flow in Mill Creek during this event was elevated and the autosampler pulse rate resulted in sample aliquots being collected every two minutes rather than every 30 to 60 minutes.

Table 17. Summary of Precipitation and Flow Data for each Sampled Storm Event

Site	Date	Sampling Duration (hours)	Total Precipitation During Sample Collection and 12 Hours Before (inches)[a]	Flow (cfs)[b]		
				Min	Max	Mean
Green River – Flaming Geyser	1/31/2012	17	0.50	2,380	2,950	2,805
	2/24/2012	24	0.43	5,320	6,760	5,988
	3/5/2012	24	0.26	1,480	1,600	1,573
	3/10/2012	24	0.54	1,100	1,110	1,105
	3/20/2012	24	0.58	965	1,210	1,144
	3/29/2012	24	1.05	980	1,700	1,141
Newaukum Creek	1/31/2012	35	0.50	164	223	192
	2/24/2012	25	0.43	120	146	134
	3/5/2012	26	0.26	62	75	73
	3/10/2012	23	0.54	49	62	51
	3/20/2012	32	0.58	122	151	137
	11/19/2012	17	1.57	136	214	183
Soos Creek	11/16/2011	22	0.43	57	70	62
	1/31/2012	25	0.58	521	558	545
	2/24/2012	22	0.50	311	345	326
	3/5/2012	16	0.34	216	228	224
	3/10/2012	18	0.37	184	210	194
	3/20/2012	23	0.52	362	377	368
Mill Creek	11/16/2011	22	0.57	22[d]	28[d]	25[d]
	1/31/2012	1.3	0.04[c]	14[d]	14[d]	14[d]
	3/10/2012	30	0.78	16	30	19
	3/20/2012	13	0.22[c]	40	42	41
	3/29/2012	20	1.01	27	48	39
	10/31/2012	5	0.32	78	81	80
Black River	11/16/2011	24	0.45	n/a	n/a	n/a
	1/31/2012	24	0.50	n/a	n/a	n/a

Site	Date	Sampling Duration (hours)	Total Precipitation During Sample Collection and 12 Hours Before (inches)[a]	Flow (cfs)[b]		
				Min	Max	Mean
	3/5/2012	23	0.28	n/a	n/a	n/a
	3/20/2012	24	0.35	n/a	n/a	n/a
	3/29/2012	24	1.08	n/a	n/a	n/a
	10/31/2012	22	0.68	n/a	n/a	n/a
Green River – Foster Links	11/16/2011	24	0.45	981	1,590	1,182
	1/31/2012	18[e]	0.50	4,380	4,590	4,439
	2/24/2012	24	0.39	7,140	8,660	7,830
	3/5/2012	21	0.28	2,250	2,380	2,323
	3/10/2012	24	0.73	1,640	1,750	1,675
	3/20/2012	24	0.35	1940[f]	2280[f]	2,041[f]

[a] Section 2.3 lists rainfall gages used for each sample location.
[b] Section 2.2 presents flow gages or flow measurement methods for each sample location.
[c] Total precipitation less than 0.25.
[d] Flow estimated from upstream gage because ISCO® flow meter was damaged during high flow event.
[e] Sample duration estimated.
[f] Flow data only available for portion of sampling event; no data for 3/21/2012.

5.7.2 Flow

The minimum, maximum, and mean flow (cfs) during each sampled storm event is presented in Table 17. As presented in Section 2.2, flow data for Soos and Newaukum creeks and the two Green River locations were based on USGS gages. The USGS gaging stations used to estimate flow at the two Green River sites are located below Howard Hanson Dam for the Green River Flaming Geyser location and at Auburn for the Green River Foster Links location. Flow in Mill Creek was estimated using an ISCO® flow meter deployed during storm events; flow during baseflow sample collection was measured with a Swoffer hand held flow meter. As previously discussed in Section 2, flow at the Black River Pump Station could not be measured.

During sampled storm events, mean estimated flow at the Green River - Flaming Geyser location ranged from 1,105 to 5,988 cfs and from 1,182 to 7,830 cfs for the Green River - Foster Links location. Only two sampling events at the main stem Green River locations corresponded with significant (>2000 cfs at USGS gaging station below the Dam) dam releases (1/31/2012 and 2/24/2012). Of the tributaries, Soos Creek generally experienced the highest flow during storm events, followed by Newaukum and Mill creeks; Mill Creek experienced some of the lowest flow conditions. Relative to Soos and Newaukum creeks, Mill Creek is relatively small in both basin size (see Table 1) and stream width where samples collected (a bank full width of approximately 15 feet).

Flow conditions during collection of baseflow samples are summarized in Table 18. Base flows in the main stem Green River were approximately 300 cfs, while flow in the tributaries ranged from 27 cfs in Soos Creek to about 1 cfs in Mill Creek. Baseflow at Black

River Pump Station is based on pumping rate at the fish ladder, where samples were collected.

Table 18. Mean Flow (cfs) During Baseflow Sampling Events

Site	Mean Base flow (cfs)[a]
Green River – Flaming Geyser	294
Newaukum Creek	19.7
Soos Creek	26.7
Mill Creek	1.2
Black River	~5
Green River – Foster Links	291

[a] Section 2.2 presents specific flow gages or flow measurement methods for each sample location.

Daily precipitation, chemical, and TSS data for both main stem Green River locations and Soos and Newaukum creeks were plotted against daily mean flow over the sampling period (Appendix D, Figures D1-D5). These plots illustrate that over the course of the study period, samples were collected during storms of varying intensities. However, it is important to note that the highest flows in the main stem Green River do not necessarily correspond to the greatest rainfall events due to water releases from the Howard Hanson Dam. For example the highest flow condition (2/24/2012) was not associated with the greatest rainfall event. For the tributaries, these plots demonstrate that comparable rainfall will elicit a greater flow later in the wet season than early in the wet season (October – November).

5.8 Relationships between Parameters

As previously discussed in Section 4.3 correlation analysis was used to explore relationships between select chemical and physical parameters. This section provides a summary of the significant findings of the correlation analysis; a complete presentation of the correlation analysis can be found in Appendix D.

A significant positive correlation between total arsenic and TSS (Spearman: R_s=0.909, $p<0.001$) (Figure 22) was observed for the combined Green River main stem sites. A significant and moderately predictive correlation was also observed between total arsenic and mean flow over the sampling period (Pearson: R_s=0.79, $p<0.05$) at the main stem sites; however, dissolved arsenic was not significantly correlated to TSS or mean flow. This finding is further supported by the plots that compare arsenic concentrations and average daily flow over time for the main stem sites (Figures D-5 and D-7, Appendix D). Particulate arsenic[7] was significantly correlated with TSS during storm events at the main stem sites with the same predictive power as that observed for total arsenic (Spearman: R_s=0.909, $p<0.001$; Appendix D).

[7] Based on the difference between total and dissolved arsenic on per sample basis.

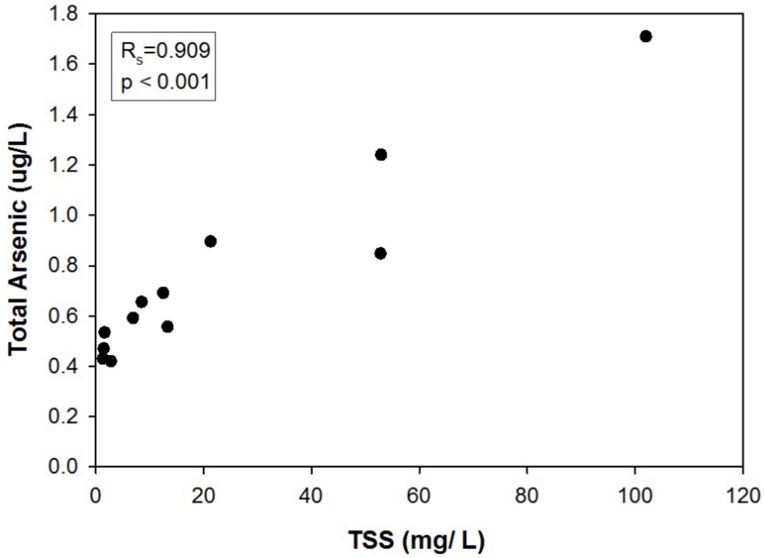


Figure 22. Relationship between Total Arsenic and TSS for the Green River Main stem Sites during Storm Events

For the tributaries, both total and dissolved arsenic were significantly and moderately correlated with TSS during storm events (Spearman: R_s=0.750, p<0.001 and R_s=0.548, p<0.05, respectively). Total arsenic was also significantly correlated to TOC and DOC, but these relationships were only moderately predictive (Spearman: R_s=0.586, p<0.05 and R_s=0.500, p<0.05, respectively). Plots of chemistry, TSS, precipitation and flow for Newaukum, Soos creeks and the main stem sites are included in Appendix D (Figures D-1 to D-10).

PAH compounds were selected for correlation analysis based on frequency of detection across sites. For the Green River main stem and tributaries, some individual PAHs were correlated with physical parameters; however, all PAH correlation results should be interpreted with caution because only detected PAH concentrations were included in analysis. Because of this, the results of the correlation analyses are only presented in Appendix D for the PAH compounds.

Total PCBs in the Green River main stem sites under storm event conditions were not significantly correlated with precipitation, average flow, or conventional parameters (p>0.05). The degree of water releases and associated suspended solids from the Howard Hanson Dam maybe influencing these relationships. For the tributaries, total PCBs were significantly and moderately correlated with TSS, TOC, and DOC during storm events (Spearman: R_s=0.731, p<0.001; R_s=0.740, p<0.0001; and R_s= 0.649, p<0.01, respectively). While PCBs are typically associated with organic carbon and fine particulates due to their hydrophobic nature, the moderate relationship observed here suggests there may be other factors influencing total PCB concentrations. Combining data from the three tributaries may also influence correlation findings, because of the potential for varying PCB sources and pathways in the individual tributary basins. Data presented in Appendix D, plotting PCB concentrations and average daily flow over time for the main stem sites, suggest that flow may not be a driving factor in PCB concentrations for the main stem Green River

locations. Similar plots for Newaukum and Soos creeks are also presented in Appendix D, although these were not significant correlations for the tributaries.

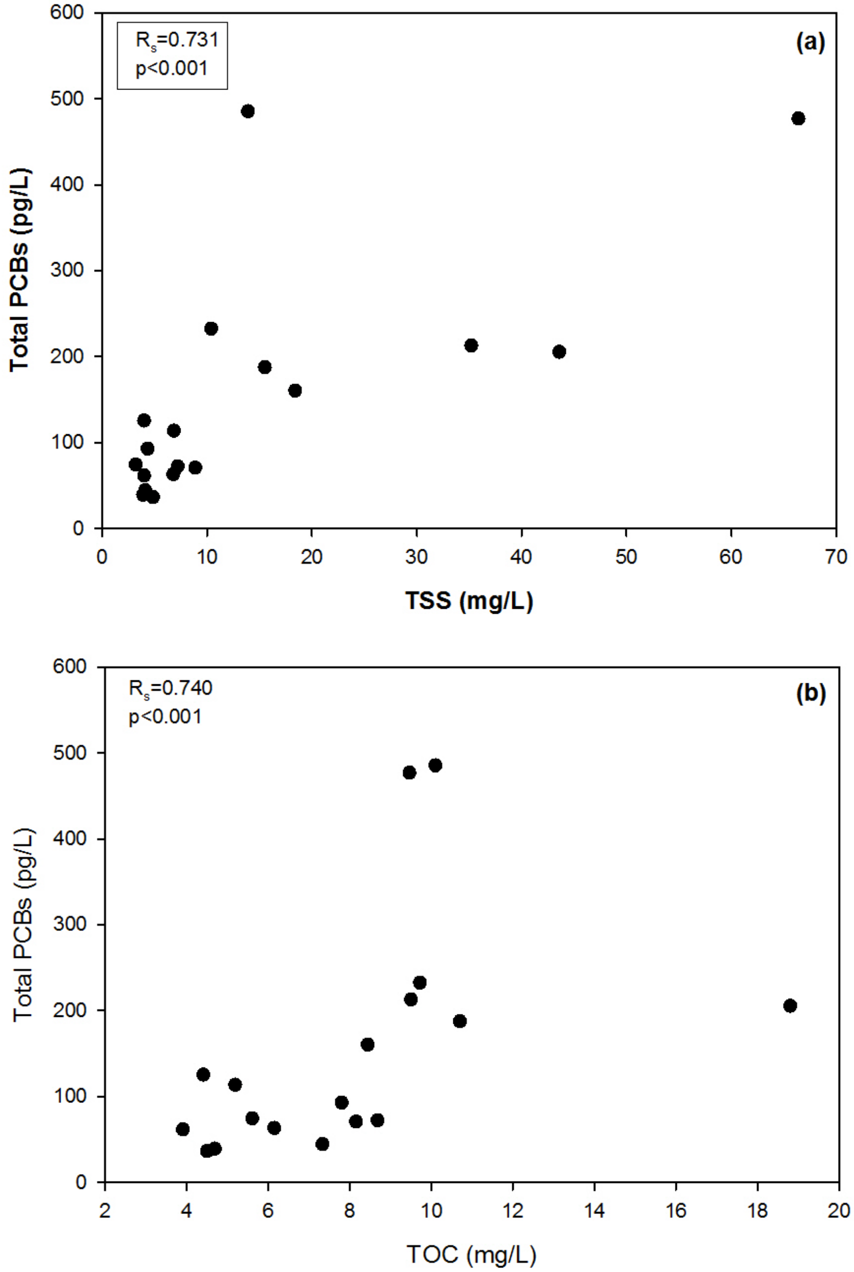


Figure 23. Relationship between Total PCBs and (a) TSS and (b) TOC for Newaukum Creek, Soos Creek, and Mill Creek during Storm Events

TSS concentrations in the two Green River main stem sites were strongly correlated with average flow over the sampling period (Spearman: R_s=0.944, $p<0.001$) (Figure 24). This was not a significant correlation for the tributaries. Higher flows in the Green River main stem can be caused by storm events and/or significant water releases from the Howard Hanson Dam, both of which can result in elevated suspended solids concentrations. This is

further supported by data presented in Appendix D, which includes plots of TSS and average daily flow over time for the main stem sites.

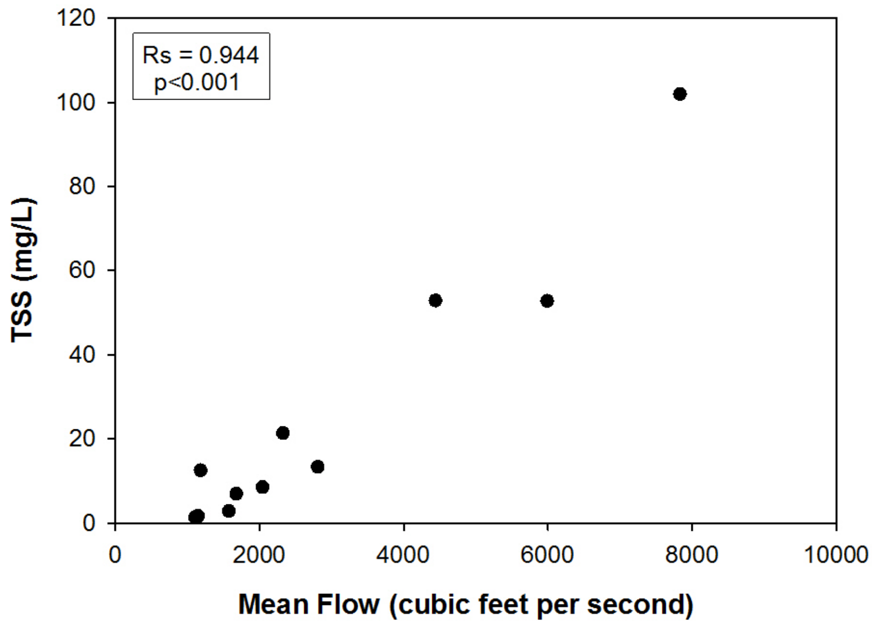


Figure 24. Relationship between TSS and Average Flow over the Sampling Period for the Two Green River Main stem Sites

While TSS concentrations in the two Green River main stem sites were not significantly correlated with precipitation over sampling period, TSS concentrations were significantly and moderately correlated with precipitation for the tributary sites (Spearman: R_S=0.490, $p<0.05$). Precipitation was not significantly correlated with any of the chemistry parameters (see Appendix D). For the Green River main stem sites, the dataset is influenced by two significant Dam releases that affected correlation analysis such that a pattern with precipitation was not observed. If more samples were collected during storm events without significant Dam releases, it is possible a relationship with precipitation might be observed.

6.0. SAMPLING METHOD EVALUATION

This section presents the results of the sampling method evaluation. As previously discussed, the purpose of this comparison was to determine if use of an autosampler effectively characterizes the water quality conditions in the main stem Green River. Data for all parameters presented in tables and figures represent the mean of three samples, with the exception of PCBs, for which only one sample was analyzed for each sampling condition. Due to the small sample size statistical analyses were not conducted on these data.

Total and dissolved arsenic concentrations measured using the two sampling methods were similar during both storm and baseflow conditions. The respective mean RPDs for total and dissolved arsenic were 2.2% and 2.4% under baseflow conditions and 2.6% and 1.1% for storm event samples (Table 19).

PAHs were evaluated as individual compounds rather than total LPAH and total HPAH because of the low detection frequency of most PAH compounds. Based on their relatively high frequency of detection in both sample types, two LPAH (acenaphthylene and anthracene) and two HPAH (chrysene and benzo(b,j,k)-fluoranthene) compounds were selected for analysis. For these PAHs, if the compound was detected in only one sample type, the RPD was calculated using the MDL to represent the non-detect PAH compound (Table 19).

For many individual LPAHs and HPAHs, both samples types had no detections. Mean RPDs for the two selected LPAH compounds ranged from 13% (anthracene) to 17% (acenaphthylene) during storm events. During baseflow conditions, acenaphthylene had a mean RPD of 8.2%; an RPD for anthracene was not calculated because it was only detected in one of three samples collected with an autosampler and not detected in the three cross-section composite samples. Mean RPDs for the two selected HPAH compounds ranged from 11% (chrysene) to 13% (benzo[b,j,k]fluoranthene) for storm events. During baseflow conditions, chrysene had a mean RPD of 46%; an RPD for benzo(b,j,k)fluoranthene was not calculated because it was only detected in three samples (two collected by autosamplers and one cross-section composite). Most of these RPDs are within the SAP quality control acceptance criteria of 40% for laboratory duplicate samples.

Table 19. Data Summary for Samples Collected by Autosampler vs. Cross-section Composite by Flow Condition

Parameter[b]		FOD	Flow	Mean Concentration[a]		Mean RPD
				Autosampler	Cross-section Composite	
Dissolved As (µg/L)		3/3	Base	0.658	**0.662**	2.2%
		3/3	Storm	**0.588**	0.584	2.6%
Total As (µg/L)		3/3	Base	0.767	**0.782**	2.4%
		3/3	Storm	**0.799**	0.794	1.1%
LPAHs	Acenaphthylene (µg/L)	3/3	Base	**0.00053 J**	0.00048 J	8.2%
		3/3	Storm	**0.00081 J**	0.00071 J	17%
	Anthracene (µg/L)	3/3	Storm	**0.00097 J**	0.00085 J	13%
HPAHs	Benzo(b,j,k)-fluoranthene (µg/L)	3/3	Storm	**0.0086 J**	0.0079 J	13%
	Chrysene (µg/L)	1/3,2/3[c]	Base	0.00025 J	**0.00038 J**	46%
		3/3	Storm	0.0033 J	0.0033 J	11%
DOC (mg/L)		3/3	Base	1.88	**1.97**	5.4%
		3/3	Storm	**3.69**	3.63	2.2%
TOC (mg/L)		3/3	Base	**2.44**	2.32	10%
		3/3	Storm	**4.63**	4.07	13%
TSS (mg/L)		3/3	Base	3.05	**3.60**	23%
		3/3	Storm	7.43	**7.77**	7.8%

RPD – Relative percent difference, FOD – Frequency of Detection

J - Value estimated; **Bolded values signify the higher mean between method types.**

[a] For arsenic and conventionals, concentrations are based on a mean of three samples. For PAH compounds, MDLs were used for non-detect concentrations for calculations. RPDs were not calculated if concentrations detected for both methods were below MDL. For total PCBs, only one sample was collected per flow condition and sample type.

[b] For LPAHs and HPAHs, only two compounds were included in this table. These were chosen based on relatively high FODs.

[c] FOD is 1/3 for autosampler and 2/3 for cross-section composite.

Total PCB results differed greatly between sampling methods during baseflow, with an RPD of 177% (Table 20). The autosampler method yielded the higher PCB concentration in both the baseflow and storm event sample pairs. The three most influential congener groups were PCB-44/47/65, PCB-45/51, and PCB-68 in both autosampler samples. These congeners were much less influential in the cross-sectional hand composite samples (Table

20). Subsequent studies have shown that congeners within these coeluting groups (i.e., PCB-47, PCB-51, and PCB-68) are indicative of contamination from silicone tubing.

While these sample pairs were intended to compare results from composite samples collected at one point versus as a cross-section to the river, another difference is the degree of exposure to silicone tubing. The autosampler composite samples were exposed to silicone tubing throughout sampling, while the cross-sectional composites were exposed to silicone tubing only during the sample splitting process (Section 2.3.3 and Section 2.4). Even after adjusting for the equipment contamination, baseflow results differed substantially between sampling methods, which could be due to environmental variability (Table 20). However, the storm event samples were similar and the RPD was within acceptable analytical variability.

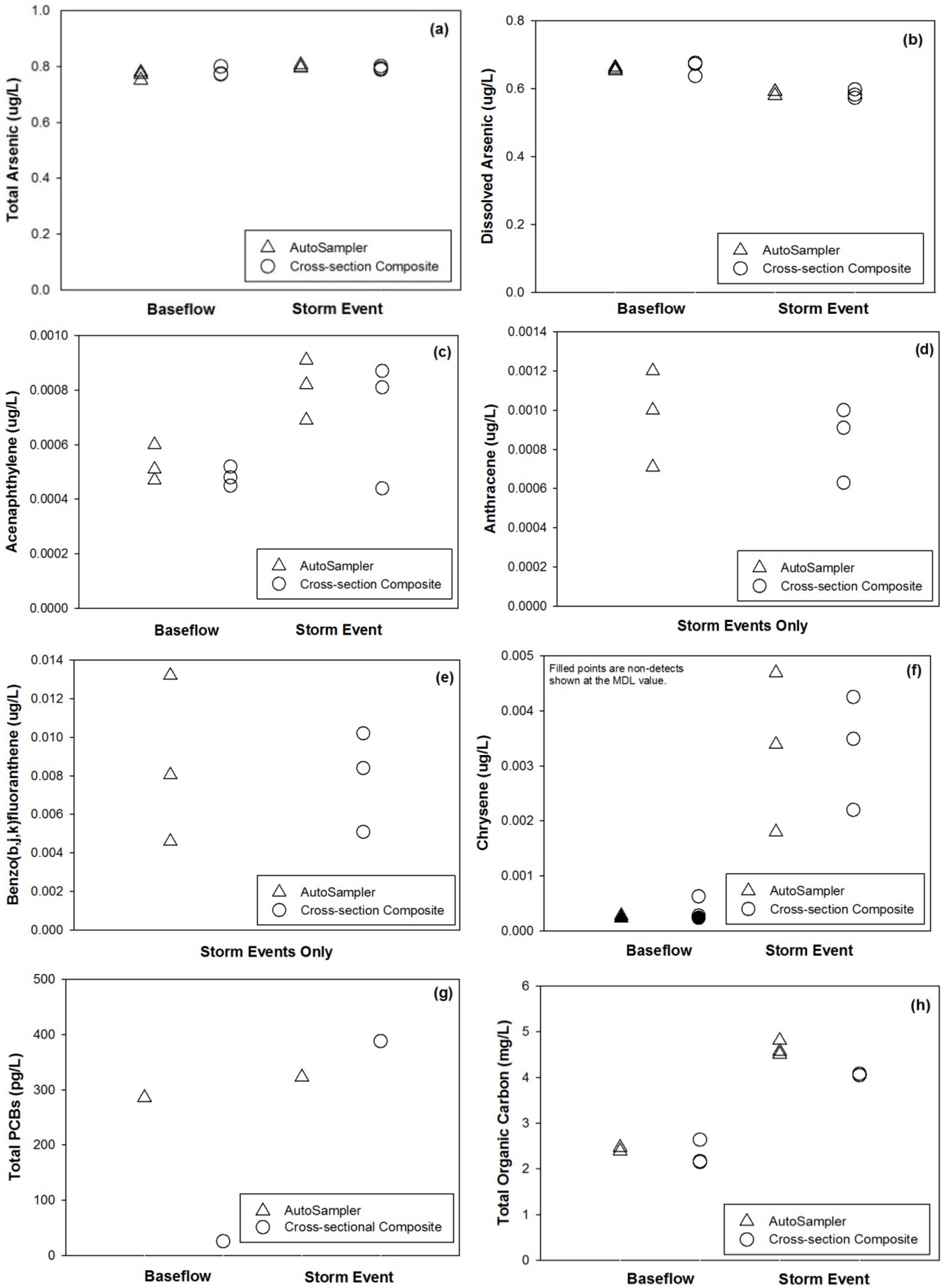
Table 20. PCBs Results in Samples Collected by Autosampler vs. Cross-section Composite by Flow Condition

Parameter	FOD	Flow	Concentration (pg/L)		RPD
			Autosampler	Cross-section Composite	
Total PCBs	1/1	Base	754 J	45.3 J	177%
	1/1	Storm	542 J	423 J	25%
Sum of PCB-44/47/65, PCB-45/51, PCB-68	1/1	Base	469 J	19.4 J	184%
	1/1	Storm	219	35.3 J	145%
Adjusted Total PCBs [a]	1/1	Base	286 J	25.9 J	167%
	1/1	Storm	323 J	388 J	18%

[a] PCB totals without PCB-44/47/65, PCB-45/51, PCB-68.

DOC, TOC and TSS concentrations were very similar in samples collected using both sampling methods. During baseflow conditions, mean RPDs for DOC, TOC, and TSS were 5.4%, 10.1% and 23.0% respectively. RPDs for samples collected during storm events for DOC, TOC and TSS were 2.2%, 12.8% and 7.8% respectively. All of these RPDs fall within the SAP quality control acceptance criteria for laboratory duplicate samples

In general, this analysis indicates that use of autosamplers is an adequate sampling method to characterize conditions in the Green River - Foster Links location. However, there is some uncertainty for PCBs under baseflow conditions where greater differences were observed between the two collection methods (based on adjustments for PCB equipment contamination). However, because only one baseflow and one storm event sample are available for this analysis, definitive conclusions cannot be drawn regarding sample method biases. Results of the two sampling methods are illustrated in Figure 25.


(a)
Total Arsenic (ug/L)
1.0
0.8
0.6
0.4
0.2
0.0
AutoSampler
Cross-section Composite
Baseflow
Storm Event
(b)
Dissolved Arsenic (ug/L)
0.8
0.6
0.4
0.2
0.0
AutoSampler
Cross-section Composite
Baseflow
Storm Event
(c)
Acenaphthylene (ug/L)
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
AutoSampler
Cross-section Composite
Baseflow
Storm Event
(d)
Anthracene (ug/L)
0.0014
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
AutoSampler
Cross-section Composite
Storm Events Only
(e)
Benzo(b,j,k)fluoranthene (ug/L)
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
AutoSampler
Cross-section Composite
Storm Events Only
(f)
Filled points are non-detects shown at the MDL value.
Chrysene (ug/L)
0.005
0.004
0.003
0.002
0.001
0.000
AutoSampler
Cross-section Composite
Baseflow
Storm Event
(g)
Total PCBs (pg/L)
500
400
300
200
100
0
AutoSampler
Cross-sectional Composite
Baseflow
Storm Event
(h)
Total Organic Carbon (mg/L)
6
5
4
3
2
1
0
AutoSampler
Cross-section Composite
Baseflow
Storm Event

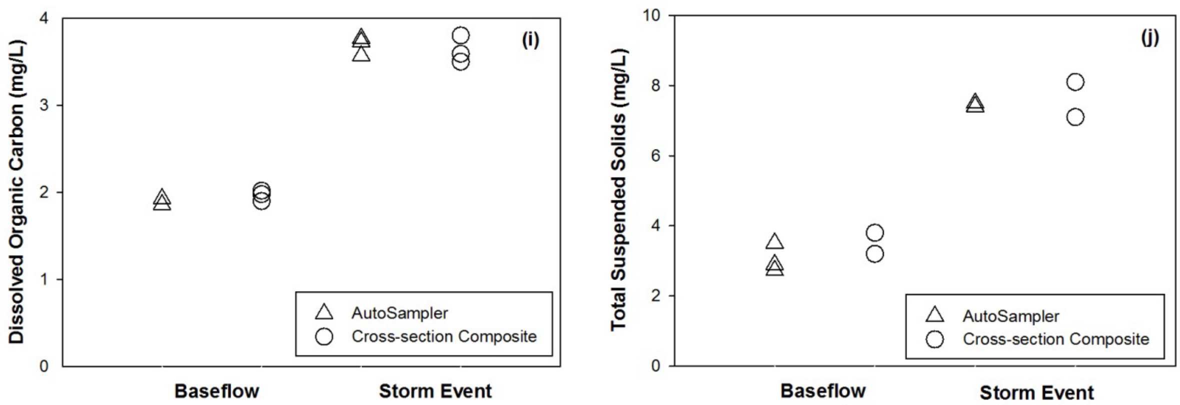


Figure 25. Autosampler and Cross-sectional Composites during Baseflow and Storm Events: Concentrations of Total Arsenic (a), Dissolved Arsenic (b), Naphthalene (c), Chrysene (d), PCBs (e), TOC (f), DOC (g) and TSS (h)

7.0. DISCUSSION AND CONCLUSION

This section presents a comparison of baseflow and storm event water quality conditions within the Green River Watershed as well as a comparison of general differences observed between sampling sites. Also included here is a discussion outlining the comparison of data from this study to data from another regional study. Finally, overall findings are summarized followed by summaries of current sampling efforts and recommendations for further work.

The primary goals of this effort were to compare concentrations of arsenic, PAHs and PCBs between dry season (baseflow conditions) and wet season (storm events) and evaluate relative differences in chemical concentrations in the Green River and its major tributaries. Sections 7.1 and 7.2 provide a discussion related to these goals. In addition to comparing and contrasting data from this study, data are also compared to findings of the Green-Duwamish WQA (Herrera 2005). As previously mentioned the Green-Duwamish WQA was conducted in 2003 to evaluate water quality conditions in the Green River Watershed and included collection and analysis of storm event and baseflow samples from both the main stem Green River and associated tributaries. However, due to analytical detection limitations, only data for arsenic and conventional parameters are comparable to data collected by this study. Section 7.3 presents a comparison of Green River data from this study compared to previous Green River water chemistry results from the LDW RI. Section 7.4 provides a comparison of data from this study to data collected from two other large river systems in the Puget Sound Basin, and other general findings of this study are discussed in Section 7.5. Finally, Section 7.6 presents the key findings, summaries of current sampling efforts and recommendations for future work.

7.1 Comparison of Baseflow and Storm Event Conditions

The two main stem Green River locations are influenced by dam releases and represent much larger drainage areas relative to the tributaries evaluated here. As a result, the hydrodynamics and source inputs associated with these systems are expected to be different. Based on these differing conditions, comparison of baseflow to storm event conditions were evaluated separately for main stem Green River sites and the tributaries. The Black River was also evaluated separately from the other tributaries because the Pump Station creates unique hydrological conditions (see Section 2.1).

To demonstrate the magnitude of differences between storm event and baseflow concentrations, ratios of mean storm event to baseflow concentration for each parameter were calculated and graphed. In addition, as discussed in Section 4.1.3, statistical differences were evaluated for baseflow versus storm event conditions.

Of the parameters evaluated, the greatest differences between mean storm event and baseflow concentrations were observed for TSS where mean storm event concentrations were higher for all location groups (i.e., main stem, tributaries, and Black River) (Figures 26, 27, 28). This difference was statistically significant for the combined

tributaries ($p<0.001$) and the Black River ($p<0.05$). The relative difference between storm event and baseflow concentrations was small for the Black River, which was likely influenced by collection of storm event samples from the pooled area behind the dam. There were no statistical differences between baseflow and storm event TSS concentrations at the main stem sites, which could be influenced by the high variability of the storm event concentrations. The Green-Duwamish WQA also compared baseflow to storm event conditions; however, statistical differences were not tested for these comparisons. The Study found higher median TSS concentrations during storm events when compared to baseflow conditions (Herrera 2005). In addition, while DOC concentrations were not very different under baseflow and storm conditions, the Green-Duwamish WQA study found TOC concentrations were consistently higher during storm events.

Mean total arsenic concentrations were slightly higher under baseflow conditions than during storm events for all location groups except the Black River, where they were very similar. These slight differences were not statistically significant ($p>0.05$), although the t-test for Black River data had power less than 0.80, indicating there was a lower probability of identifying a statistical difference if one existed.

With the exception of the Black River, mean dissolved arsenic concentrations were greater during baseflow conditions than storm events (Figures 26, 27, 28). This difference was statistically significant for the combined main stem and the three combined tributaries ($p<0.001$ and $p<0.01$, respectively). The lower dissolved arsenic concentrations observed during storm events may be due to dilution of the naturally occurring arsenic present in these water bodies. The mean dissolved arsenic concentrations in Black River storm event samples were statistically higher than levels in baseflow samples ($p<0.05$). With the possible exception of the Black River, baseflow arsenic concentrations were dominated by the dissolved fraction; this pattern was not consistently observed in storm event samples where the dissolved fraction was more variable between sites and events. For both total and dissolved arsenic, differences in storm and baseflow mean concentrations were small and could be a function of analytical or environmental variability. The Green-Duwamish WQA did not test statistical differences in total or dissolved arsenic concentrations between storm and baseflow conditions (Herrera 2005).

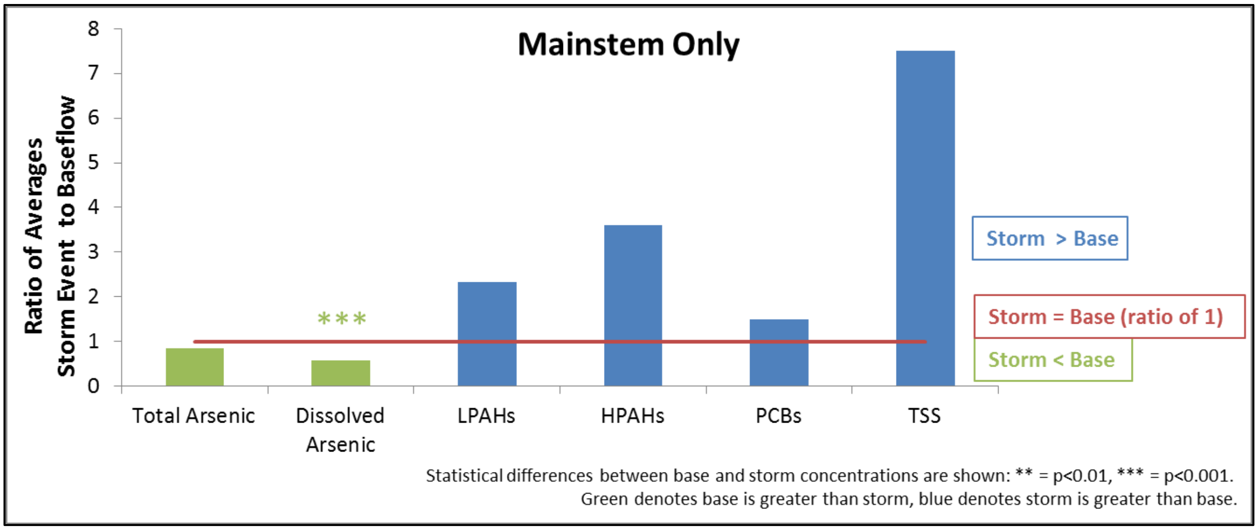


Figure 26. Mean Storm Event Concentrations Relative to Mean Baseflow Concentrations for the Two Green River Main stem Sites Combined

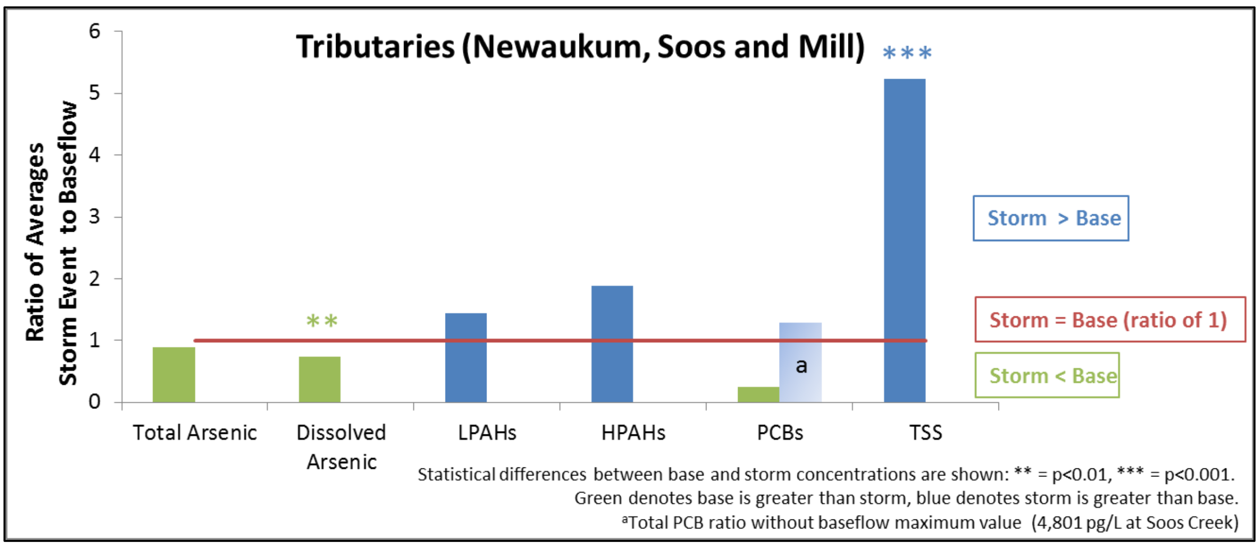


Figure 27. Mean Storm Event Concentrations Relative to Mean Baseflow Concentrations for the Newaukum, Soos and Mill creeks Sites Combined

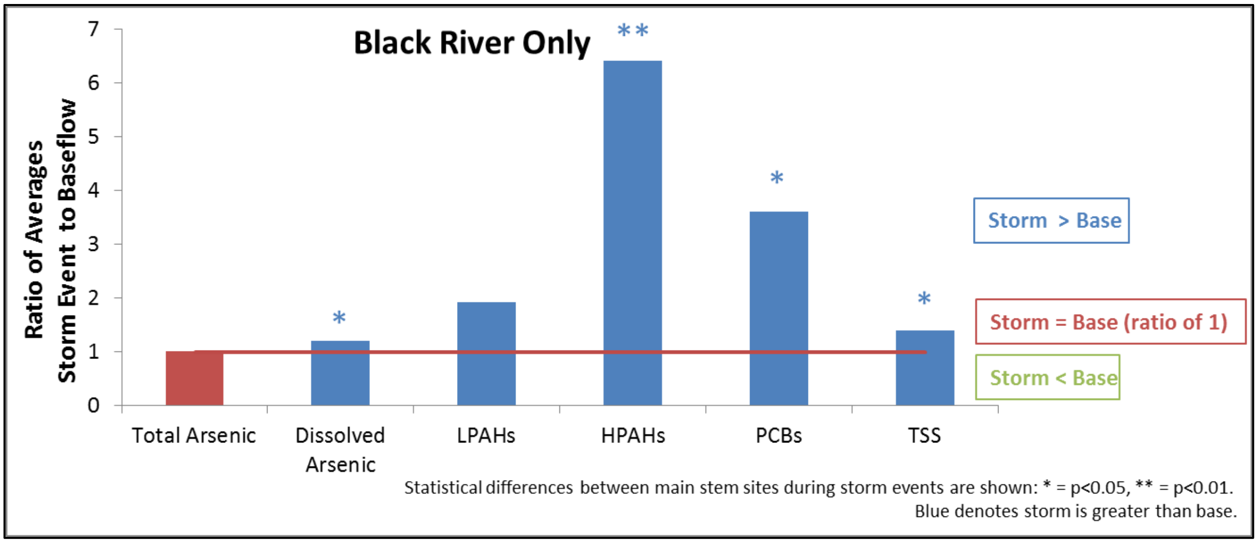


Figure 28. Mean Storm Event Concentrations Relative to Mean Baseflow Concentrations for the Black River Site Only

For all location groups, mean LPAH and HPAH concentrations during storm events were greater than levels measured during baseflow conditions (Figures 26, 27, 28). These differences were not statistically significant, except for HPAH concentrations in the Black River ($p<0.01$) (Figure 28). The t-tests for LPAHs for both the mainstem and Black River had statistical power less than 0.80, indicating there was a lower probability of identifying a statistical difference if one existed. It is important to keep in mind that the frequency of detection and detected concentrations in these samples were very low. Additional data collection and analysis would be necessary to better understand the potential for storm event conditions to influence PAH concentrations.

In Black River storm event samples, mean total PCB concentrations were statistically greater than those detected in baseflow samples (Figure 28; $p<0.05$). For the combined main stem sites, mean total PCB concentrations were slightly higher during storm events but there were no statistically significant differences. For the combined tributaries, mean total PCB concentrations were slightly higher under baseflow conditions; however, this finding was highly influenced by one baseflow sampling event in Soos Creek where total PCB concentrations were approximately 100 times higher than levels detected in the next highest baseflow sample at this site. When this data point is excluded, the total PCB storm event concentrations in the tributaries were generally higher than levels detected under baseflow conditions, but there were no statistically significant differences (Figure 27).

7.2 Relative Concentration Differences between Locations

The magnitude of difference in mean concentrations between locations during baseflow conditions is presented in Figure 29; mean differences during storm event conditions are illustrated in Figures 30-32. These figures present the ratio of each site mean concentration

to the lowest site mean concentration for each parameter (by sample type). In addition, as discussed in Section 4.1.3, statistical differences between sites were evaluated for storm event conditions; due to small sample sizes, statistical analysis was not conducted to compare baseflow concentrations.

The highest mean DOC and TOC levels were observed in Mill and Newaukum creeks during storm events; concentrations were up to approximately four times as high as levels in the other locations (Figure 30). The lowest levels of DOC and TOC during storm events were detected at the Green River – Flaming Geyser location. For both DOC and TOC, storm event concentrations were statistically higher in Mill Creek than at both main stem locations. DOC and TOC concentrations were also statistically higher at Newaukum Creek when compared to the Green River – Flaming Geyser location. Some of the highest mean TSS levels were detected in storm event samples from the Green River – Foster Links location, followed by Mill Creek; mean concentrations were about five times those found at the other locations (Figure 30). However, there were no statistical differences in TSS concentration between sites. Under baseflow conditions, mean TSS concentrations were higher at all three downstream locations relative to the three upstream locations (Figure 29). The Green-Duwamish WQA also observed spatial differences in TOC and DOC concentrations between sites and also found no statistical spatial differences in TSS concentrations between stream locations (Herrera 2005).

Of the parameters analyzed, total and dissolved arsenic concentrations were the least variable across locations. Mean baseflow concentrations of total and dissolved arsenic were all within a factor of 2 of each other (Figure 29). During storm events, mean total arsenic concentrations tended to be highest at the three most downstream locations (Mill Creek, Black River and Green River – Foster Links), and were almost twice as high as concentrations detected in the two most upstream sites (Figure 31). Total arsenic concentrations during storm events at Mill Creek were statistically greater than concentrations at the Green River – Flaming Geyser location and Newaukum Creek. Concentrations in the Black River were also statistically greater than Newaukum Creek during storm events ($p<0.05$). During storm events, Mill Creek had the highest mean dissolved arsenic concentration followed by the Black River. These were both statistically greater than storm event concentrations at both Green River main stem sites. Dissolved arsenic concentrations at Mill Creek were also statistically greater than concentrations at Newaukum Creek ($p<0.05$). The Green-Duwamish WQA also found some spatial significant differences in arsenic concentrations between sites (Herrera 2005).[8]

The highest mean LPAH concentration across all sites and sample types was detected in baseflow samples from Soos Creek and was up to six times higher than mean concentrations at the other locations (Figure 29). However, the mean value was highly influenced by one sample with an LPAH concentration (0.101 µg/L) that was higher than levels detected during all other baseflow and storm events. The Green River – Foster Links location and the Black River had the next highest mean baseflow concentrations compared

[8] Similar evaluations were not made for total PCBs or PAHs in the Green-Duwamish Watershed WQA because PCBs were not detected (based on Aroclor analysis) and PAHs were infrequently detected (method sensitivities between studies were not comparable for either of these analytes).

to other sites. LPAH concentrations in storm event samples were less variable between sites than in baseflow samples and no statistical differences between sites were observed (Figure 32).

Detected concentrations of HPAHs were relatively low. The highest mean concentrations were observed during storm events at the three most downstream locations with the Black River being the highest; the mean concentration at this site was up to 54 times as high as levels in the three most upstream locations (Figure 32). During storm events median HPAH concentrations at the Black River and the three most upstream locations were statistically different ($p<0.05$). Mean HPAH concentrations in Black River baseflow samples were highest relative to mean concentrations at the other sampling sites (mean ratio = 7.7) (Figure 29).

Similar to the pattern observed for LPAHs, the highest mean total PCB concentration was also observed in Soos Creek during baseflow conditions; this value was up to 20 times higher than mean concentrations detected at the other locations (Figure 29). Similar to LPAHs, the mean total PCB concentration in Soos Creek during baseflow conditions was highly influenced by one sample with a total PCB concentration that was higher than levels detected in all other baseflow and storm event samples. The next highest PCB concentration was detected in the Black River, which also had the highest mean concentration relative to other sites during storm event conditions. Total PCB storm event concentrations were statistically different in the Black River compared to the Green River – Flaming Geyser site, Newaukum Creek, and Soos Creek (Figure 32).

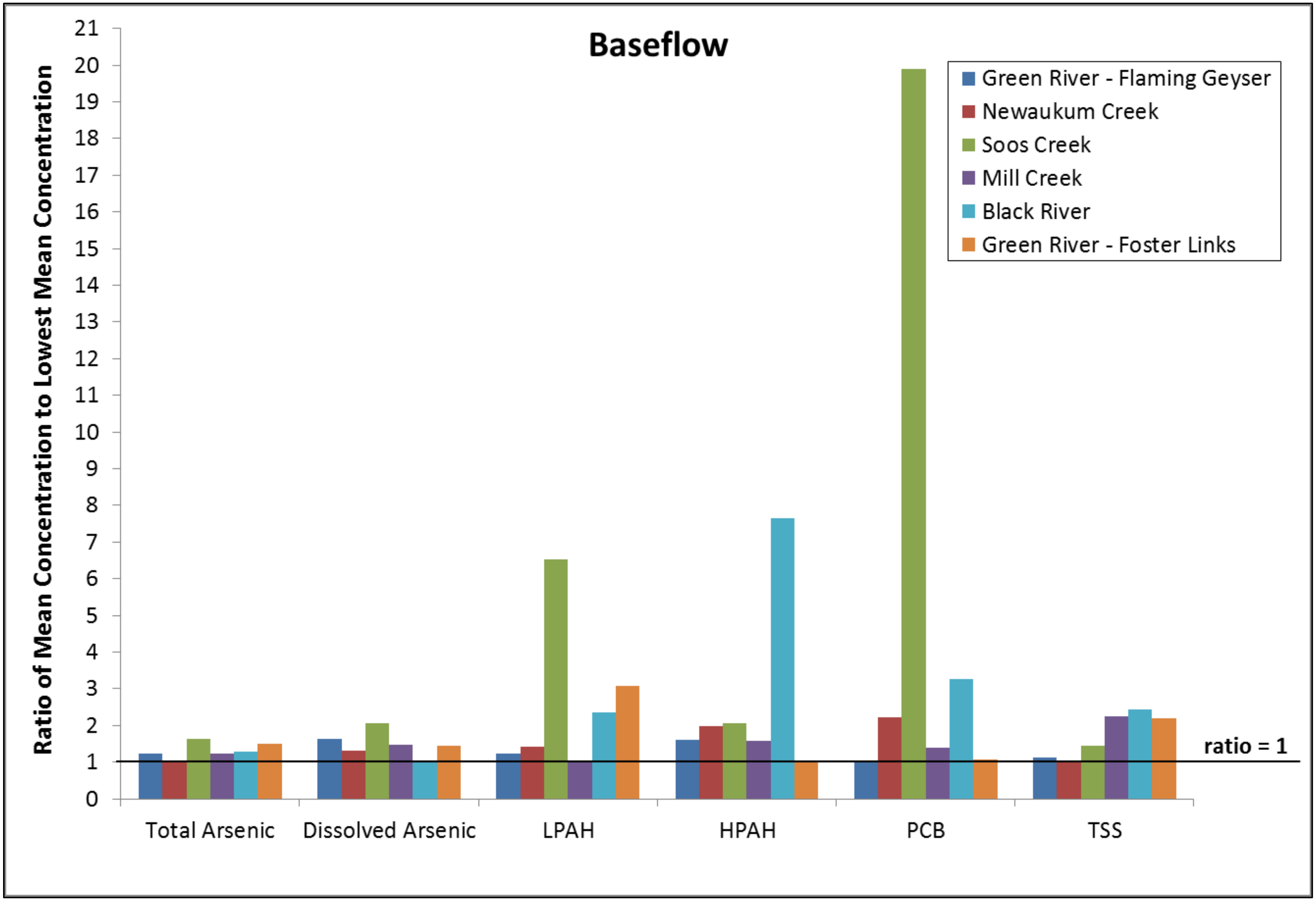


Figure 29. Ratios of Mean Concentrations at Each Site Relative to the Lowest Mean Concentration during Baseflow

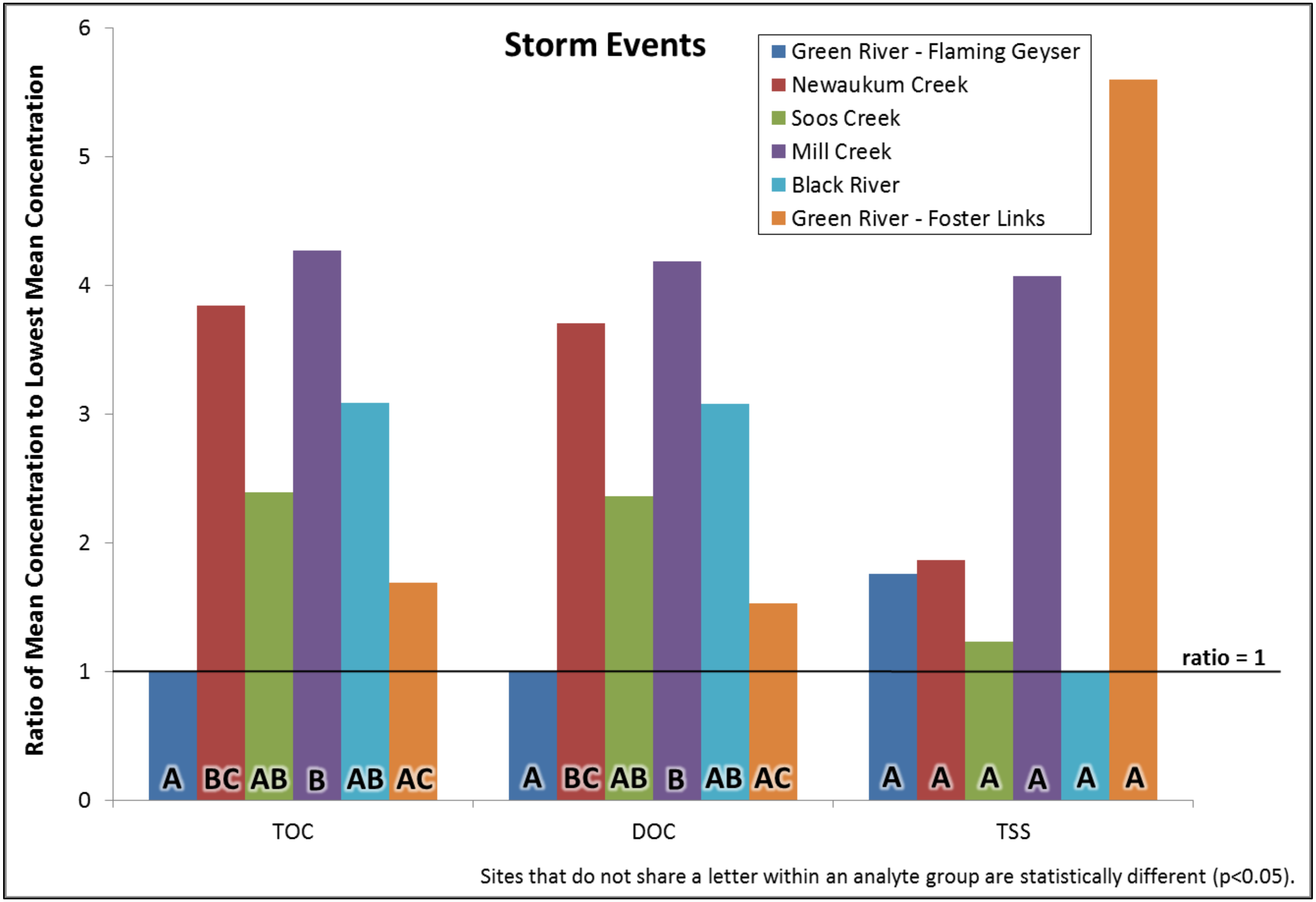


Figure 30. Ratios of Mean Concentrations at Each Site Relative to the Lowest Mean Concentration for Conventionals during Storm Events.

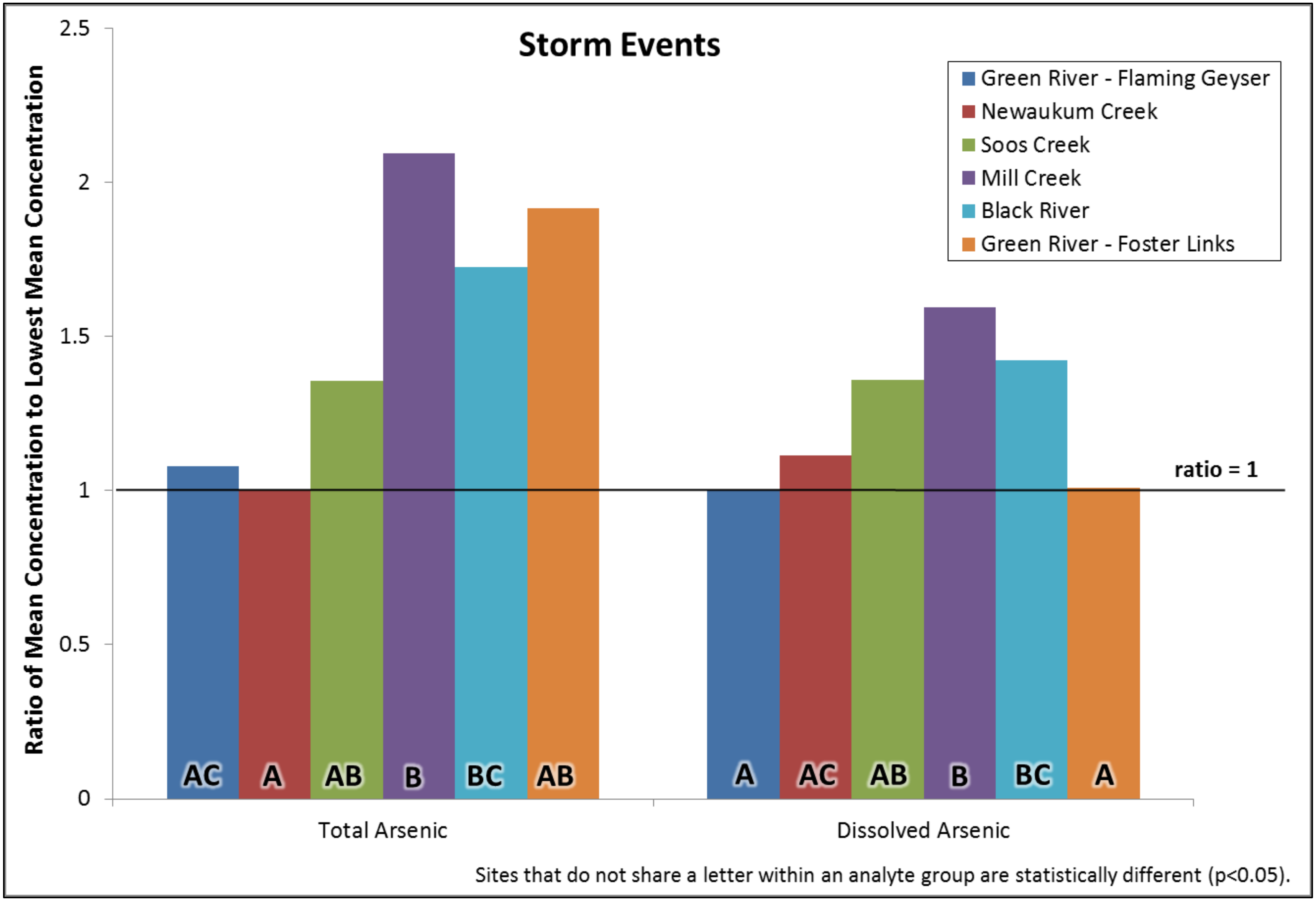


Figure 31. Ratios of Mean Concentrations at Each Site Relative to the Lowest Mean Concentration for Arsenic during Storm Events

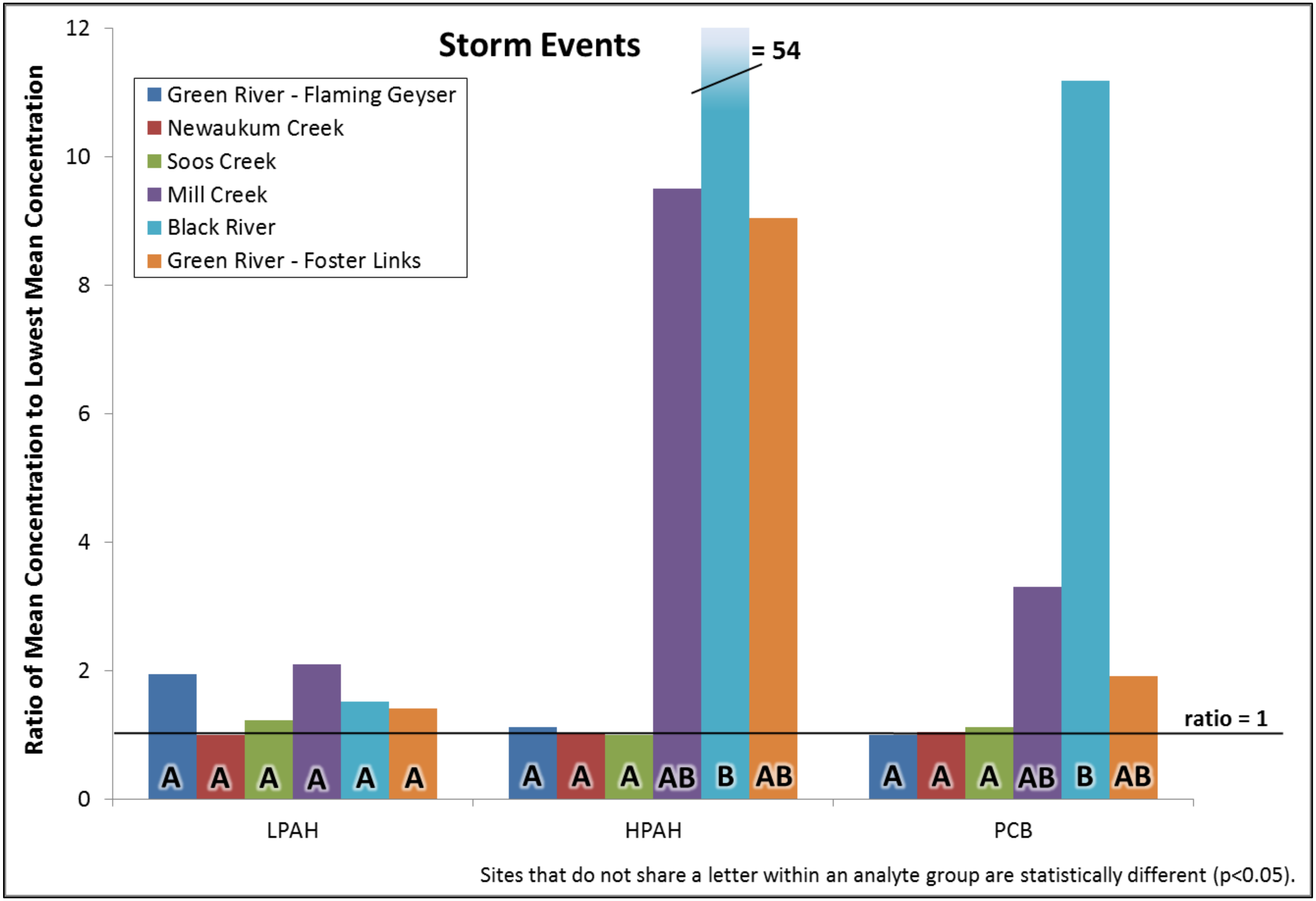
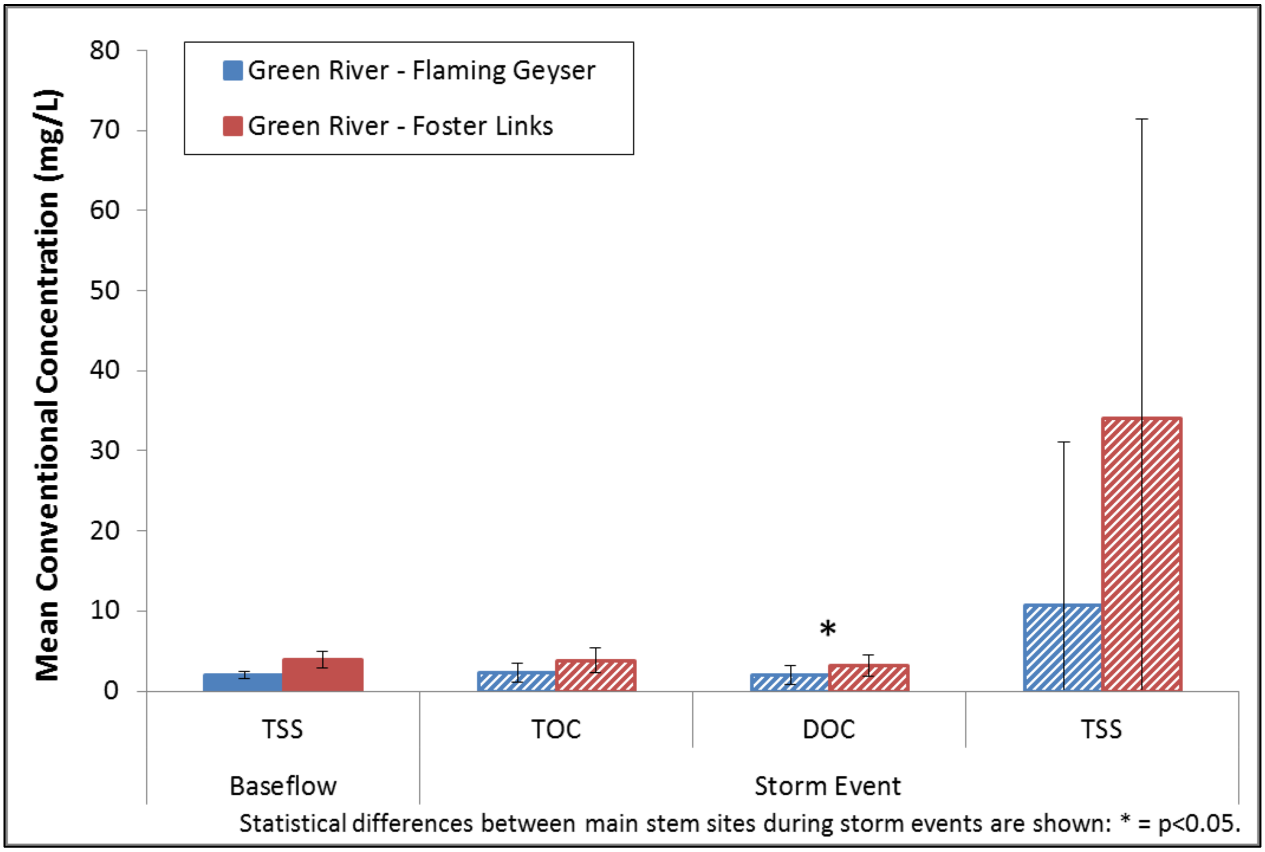


Figure 32. Ratios of Mean Concentrations at Each Site Relative to the Lowest Mean Concentration for Organics during Storm Events

Comparison of storm event data between the upstream and downstream main stem Green River locations indicated that storm event concentrations of DOC, total arsenic and total HPAHs were statistically higher in the downstream location (Foster Links) (Figures 33-36). While most mean storm event concentrations for other parameters were also higher at the downstream location, these differences were not significant.[9] Statistical power was sometimes low due to limited sample size and variable concentrations. For example, while higher mean TSS concentrations were detected at the downstream location, the overlap in the concentration data at the two locations (see error bars in Figure 33), resulted in no significant differences between locations. The most notable exception to this pattern was for total LPAH concentrations, for which the mean concentration during storm events was higher at the upstream site; however, due to high variability, this difference was not statistically significant.

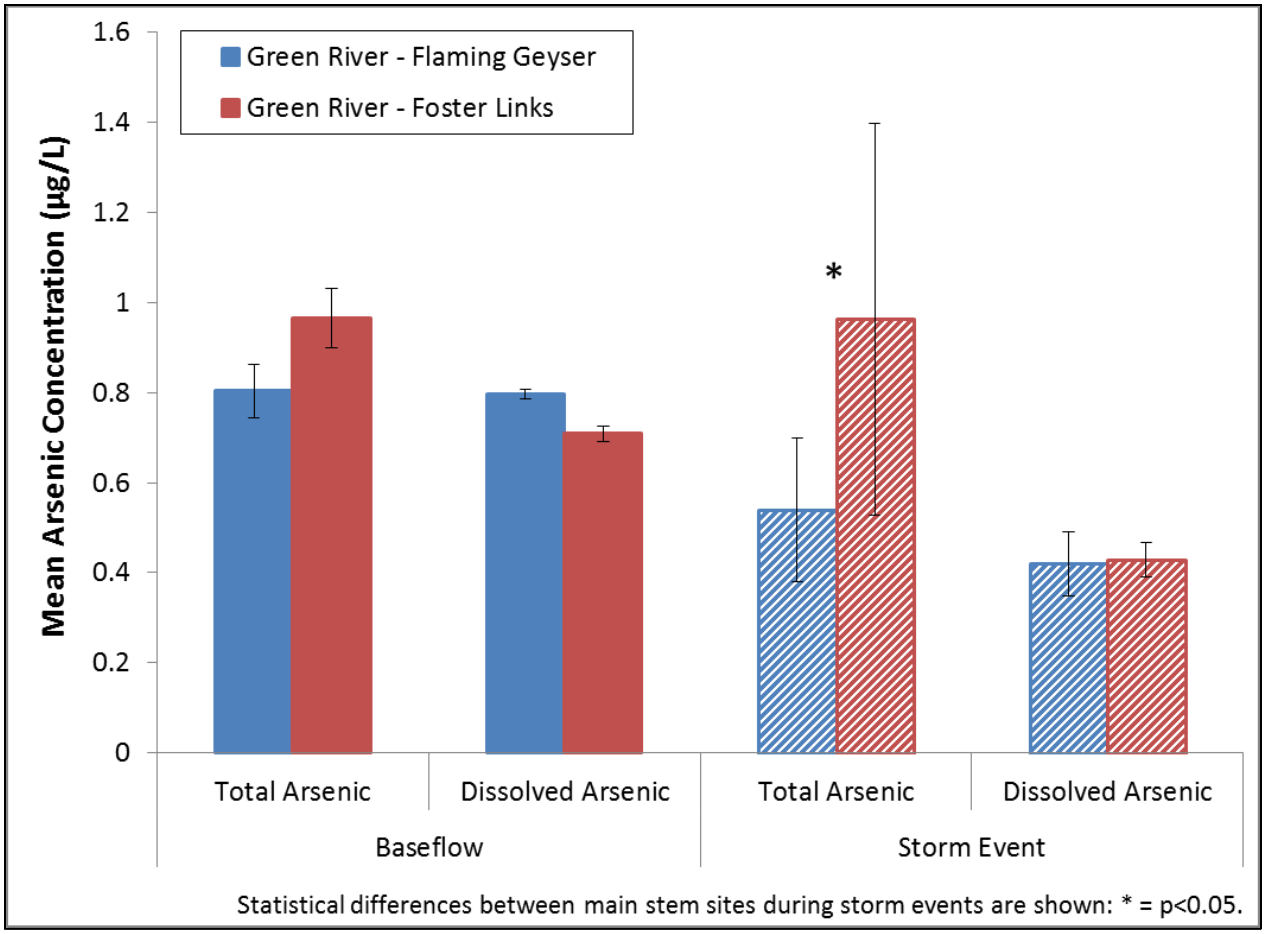
Similar evaluations were performed in the Green-Duwamish Watershed Water Quality Assessment (Herrera 2005): there were no statistical differences observed between upstream and downstream concentrations of dissolved arsenic, DOC or TOC. However, levels of total arsenic were statistically higher at the downstream location during storm events. In addition, TSS concentrations were statistically higher in downstream samples during baseflow conditions; however, no significant differences were observed between the two locations during storm event conditions (Herrera 2005).

[9] Due to small sample size of baseflow events, statistical analyses were not performed.



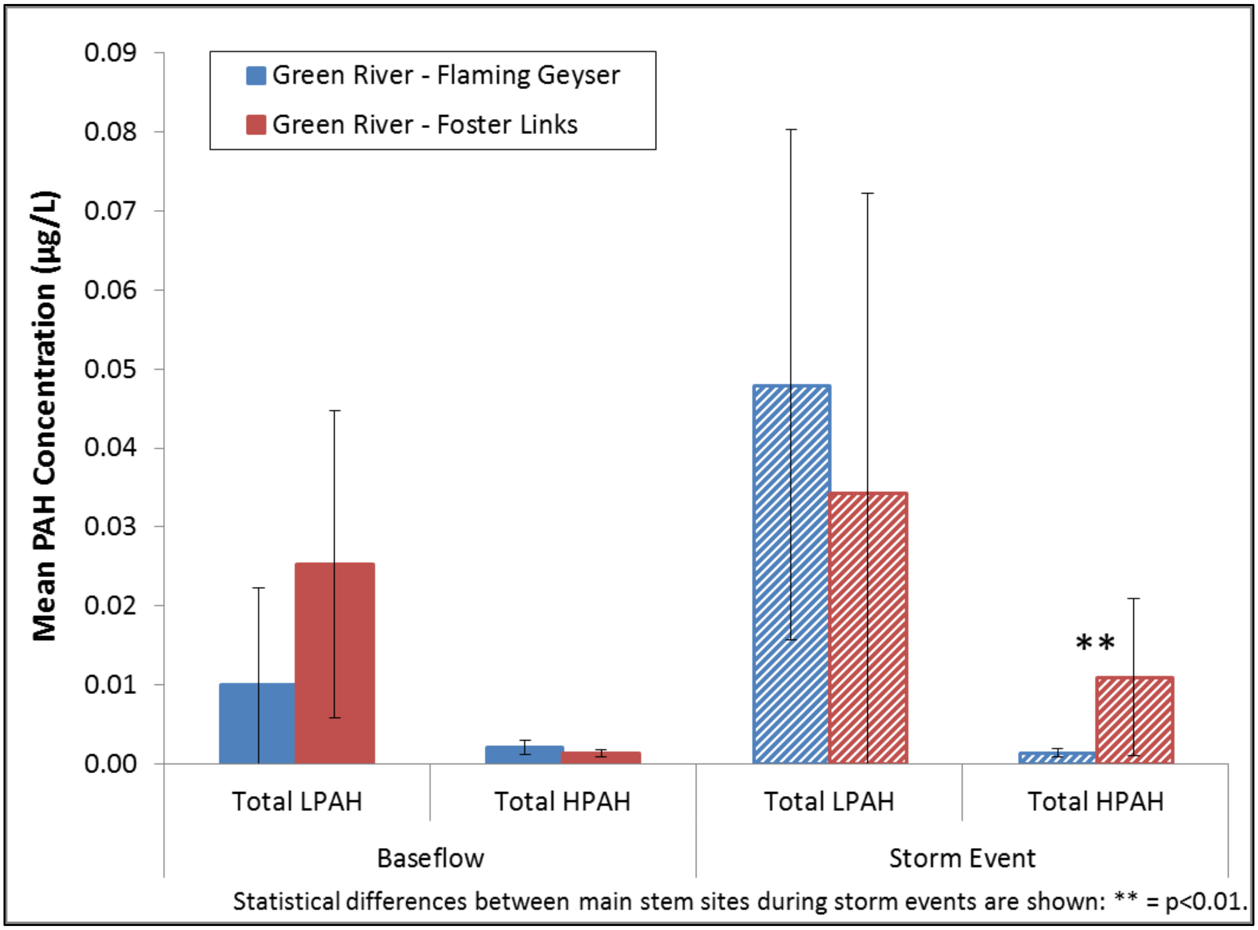
Error bars are standard deviations.

Figure 33. Comparison of Mean TOC, DOC and TSS Concentrations between Upstream and Downstream Green River Sampling Locations



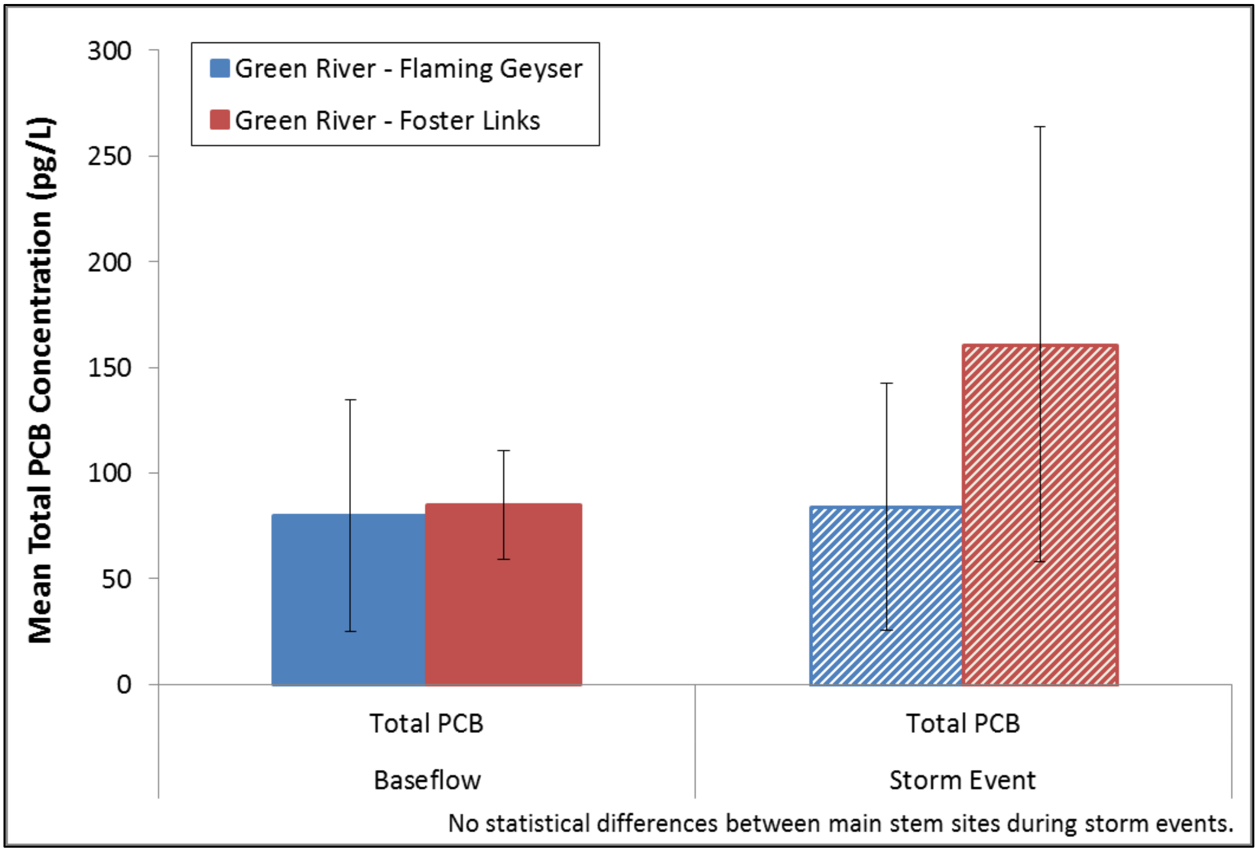
Error bars are standard deviations.

Figure 34. Comparison of Mean Arsenic Concentrations between Upstream and Downstream Green River Sampling Locations



Error bars are standard deviations.

Figure 35. Comparison of Mean Total LPAH and HPAH Concentrations between Upstream and Downstream Green River Sampling Locations



Error bars are standard deviations.

Figure 36. Comparison of Mean Total PCB Concentrations between Upstream and Downstream Green River Sampling Locations

7.3 Comparison to Previous Downstream Green River Sampling Efforts

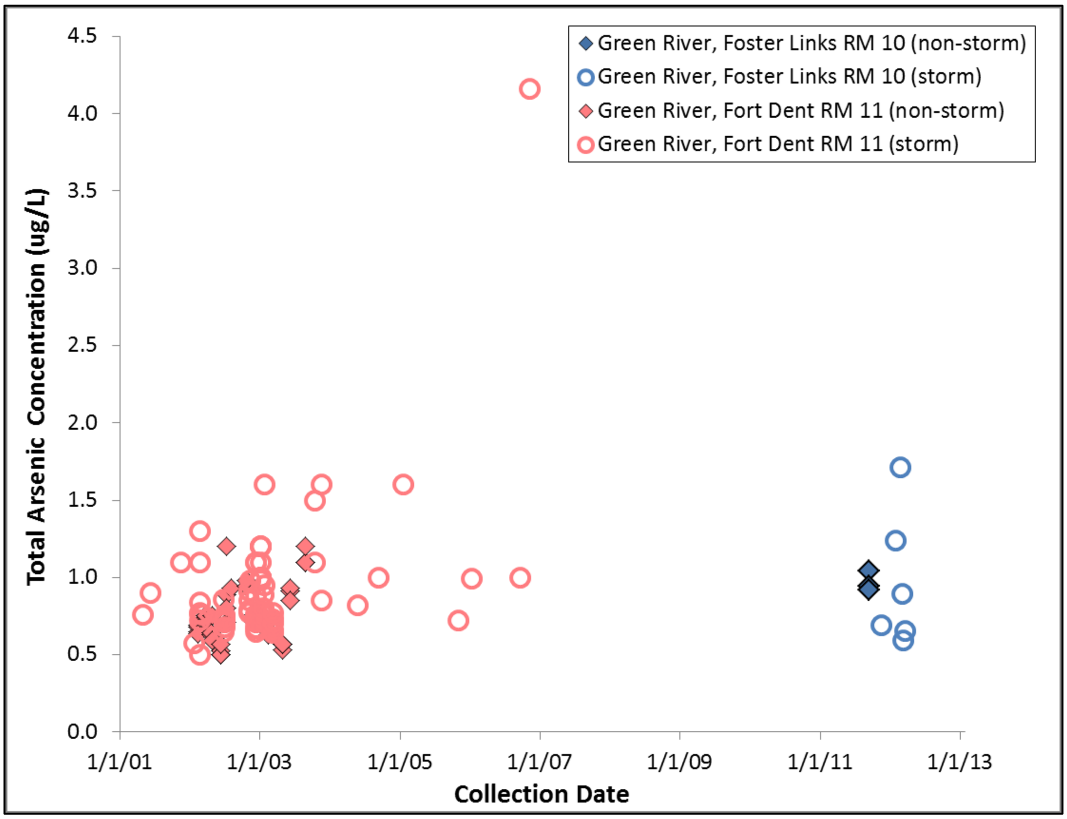
The LDW RI (Windward 2010) summarizes surface water concentrations for total and dissolved arsenic, PAHs and total PCBs (based on congener analysis) in the Green River from previous sampling efforts. The LDW RI includes data for samples collected from the Duwamish River at East Marginal Way Bridge (approximately river mile 6), in addition to the Green River at Fort Dent (approximately river mile 11), which is about one river mile upstream of the Foster Links sampling location and upstream of the confluence with the Black River. Arsenic data[10] presented in the LDW RI included both surface water grab samples and composite samples, whereas the PAH and PCB data were grab samples only (as opposed to composite samples collected in this study)[11]. The data summarized in the LDW RI were collected between 2001 and 2008 during both storm and non-storm events (includes both wet and dry season non- storm samples). Statistical comparisons regarding

[10] The 2003 arsenic data summarized in the LDW RI are the same data evaluated in the Herrera 2005 study.

[11] The PCB grab samples collected for the LDW RI are not impacted by contamination from silicone tubing.

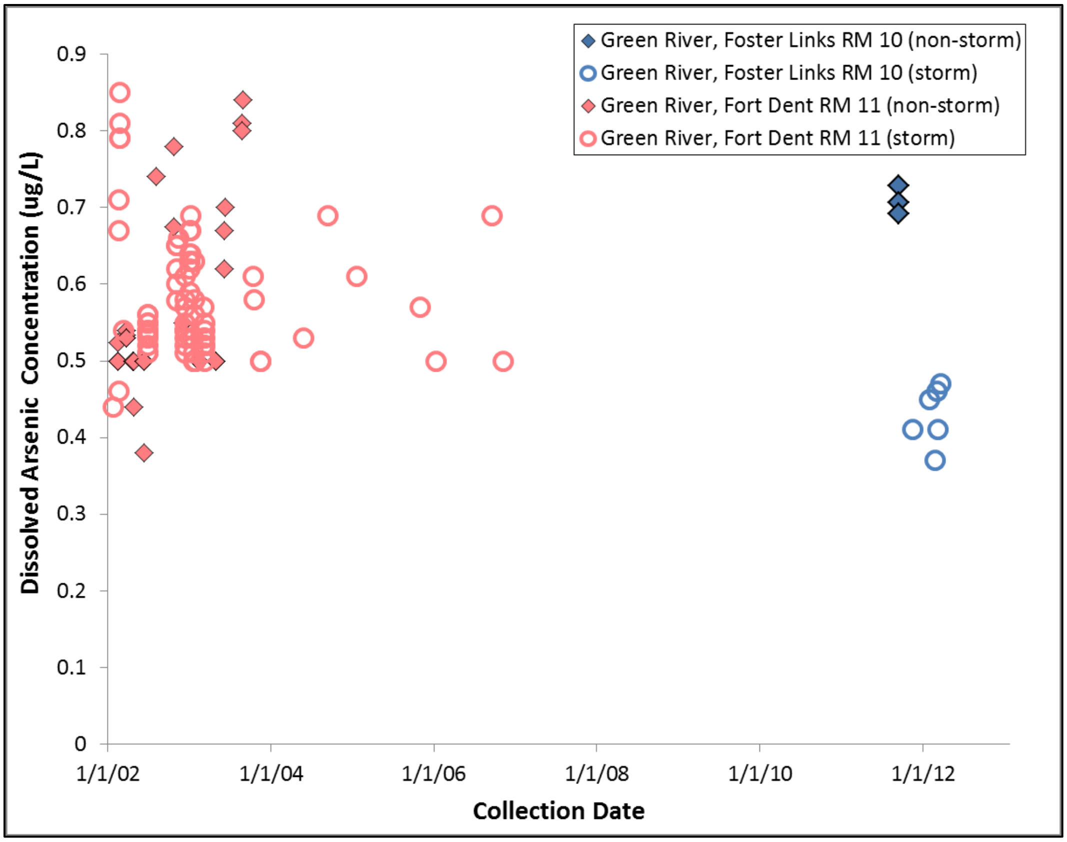
the differences between the previous and current studies were not made; therefore, only general observations of the data sets are discussed here.

While total arsenic concentrations for both data sets were within the same range (Figure 37), dissolved arsenic concentrations during storm events were generally lower in the current study. In addition, dissolved arsenic concentrations for non-storm events as presented by the LDW RI exhibited a larger concentration range than detected in the current study under baseflow conditions (Figure 38). When total LPAHs concentrations are compared, the current study showed a much wider range of concentrations during storm events, but a similar range during non-storm/baseflow events (Figure 39). HPAH results in the LDW RI indicate a broader range of concentrations during non-storm events compared to the current study, but a smaller range during storm events (Figure 40). However, for both LPAHs and HPAHs, the storm event data available for comparison is limited because data for only two storm events are presented in the LDW RI. Total PCB concentrations in the current study were within the range of the lowest LDW RI results for both storm and non-storm samples.



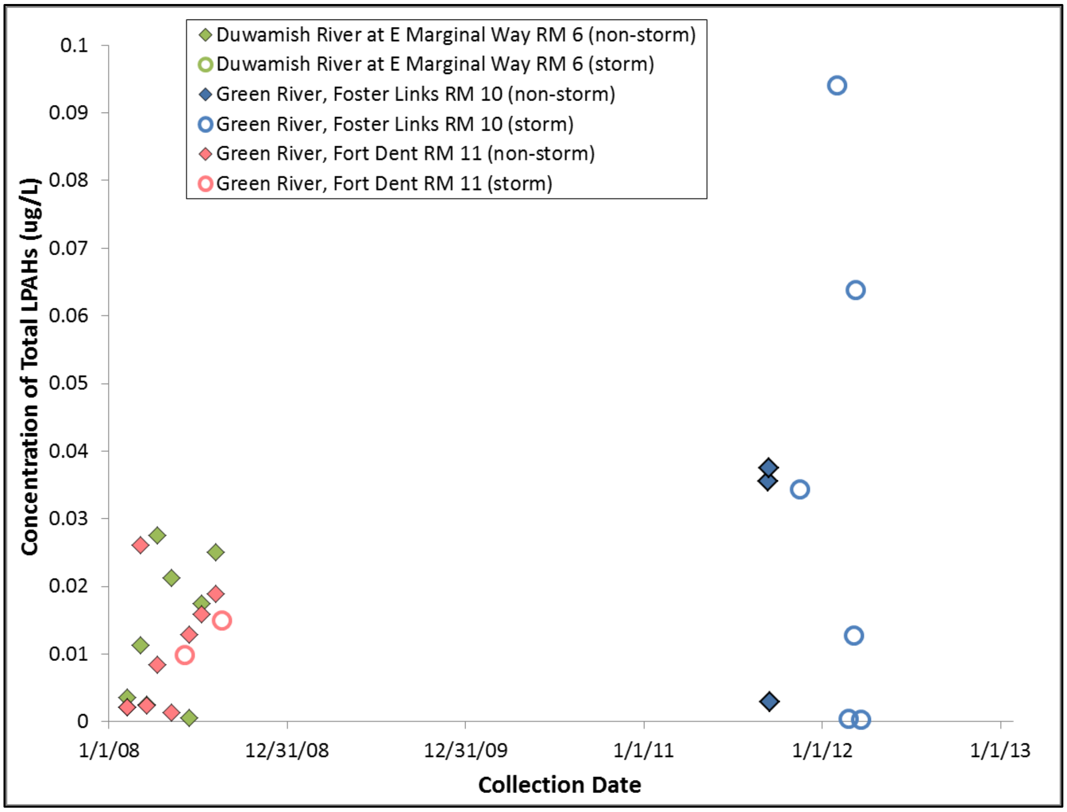
Mix of grab and composite samples collected from 2001 to 2008; 12-24 hour composite samples collected from 2011 to 2012. Foster Link samples are from the current study.

Figure 37. Total Arsenic Concentrations in Downstream Green River Grab and Composite Samples Collected Between 2001 and 2012



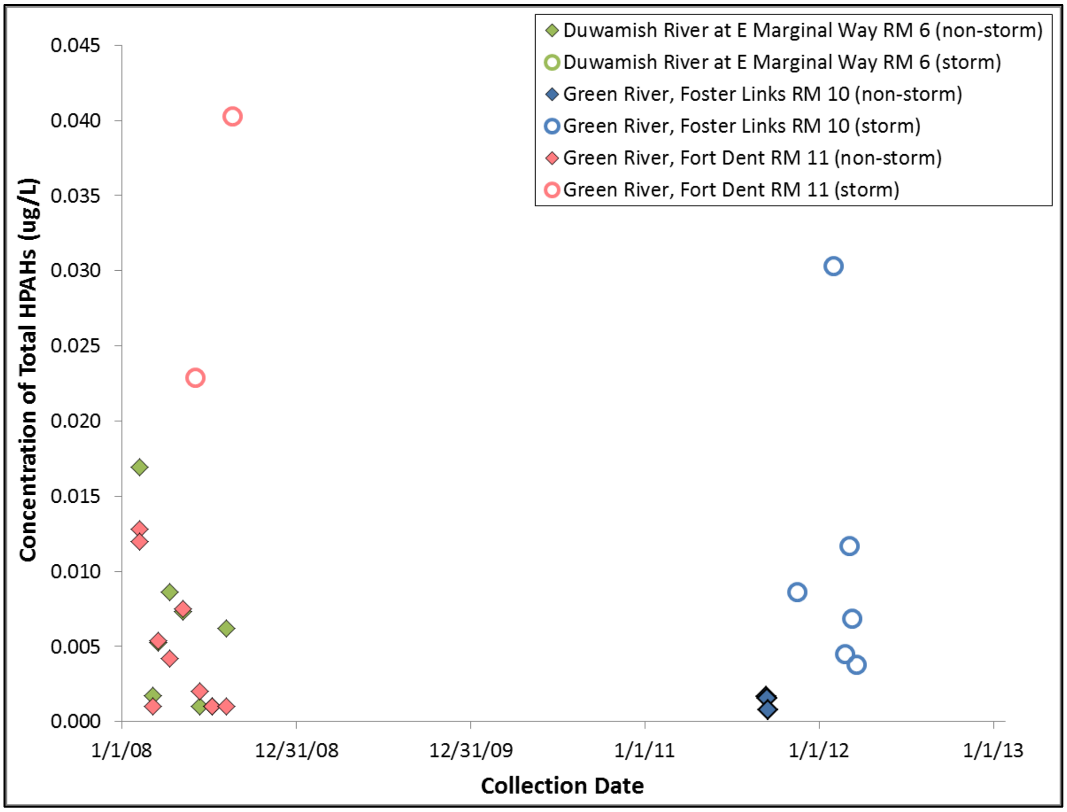
Mix of grab and composite samples collected from 2002 to 2008; 12-24 hour composite samples collected from 2011 to 2012. Foster Link samples are from the current study.

Figure 38. Dissolved Arsenic Concentrations in Downstream Green River Grab and Composite Samples Collected Between 2002 and 2012



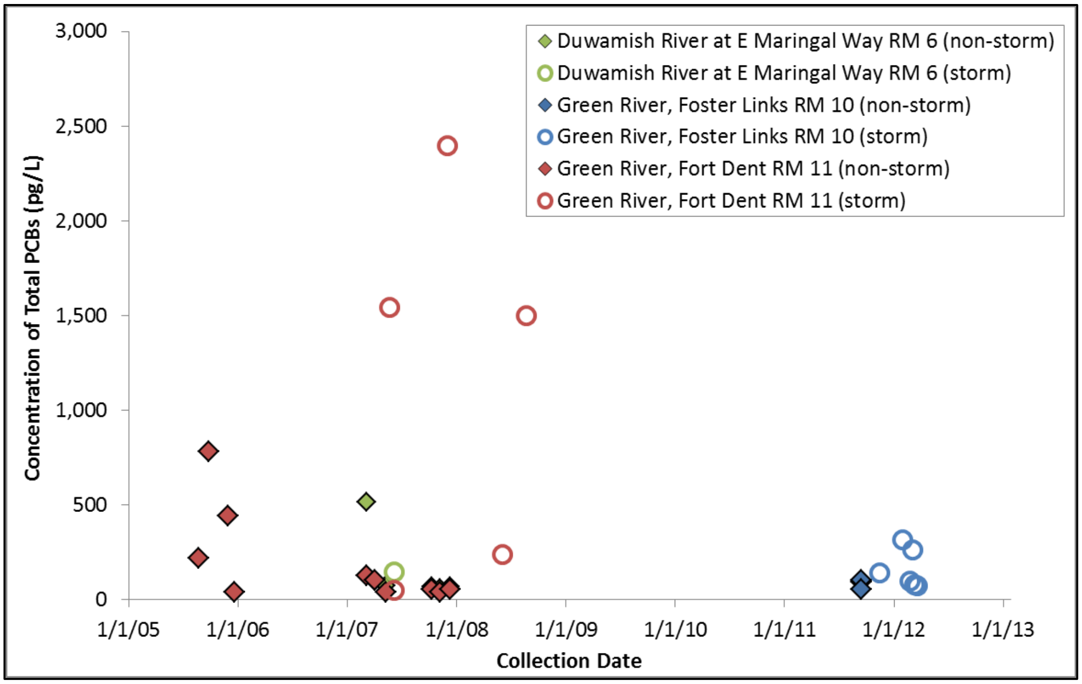
Grab samples collected in 2008; 12-24 hour composite samples collected from 2011 to 2012. Foster Link samples are from the current study.

Figure 39. Total LPAH Concentrations in Downstream Green River Grab and Composite Samples Collected Between 2008 and 2012



Grab samples collected in 2008; 12-24 hour composite samples collected from 2011 to 2012. Foster Link samples are from the current study.

Figure 40. Total HPAH Concentrations in Downstream Green River Grab and Composite Samples Collected Between 2008 and 2012



Grab samples collected from 2005 to 2008; 12-24 hour composite samples collected from 2011 to 2012. Foster Link samples are from the current study.

Figure 41. Total PCB Concentrations in Downstream Green River Grab and Composite Samples Collected Between 2005 and 2012

7.4 Comparison to Other Regional Watersheds

To provide additional context for interpretation, data from this study were compared to findings of the Surface Runoff Study conducted by Ecology (Ecology 2011) to evaluate chemical loadings from different land use types in the Puyallup and Snohomish watersheds. The purpose of this comparison was to evaluate if contaminant concentrations in the Green River and its major tributaries were similar to levels observed in two other large river systems in Western Washington.

The Ecology study collected both baseflow and storm event samples from multiple sub-basins representing a variety of land use types in both the Puyallup and Snohomish watersheds (Ecology 2011); samples were analyzed for a large suite of chemicals, including low level PAHs and PCB congeners. Unlike this Green River study where12-24 hour composite samples were collected, the Ecology study collected a single grab sample during baseflow conditions and generally two grabs (composited) during storm events. To facilitate data comparison, sampling locations from this study were classified by current land use, similar to the categorization used by the Ecology study. In addition, all sites regardless of land use type were combined; overall mean concentrations were generated for both baseflow and storm event conditions for each study for comparison purposes. Because no basins sampled in the Ecology Study were classified as mixed land use, the overall average of all Snohomish and Puyallup river sites combined was used to compare to Green River study locations classified as mixed land use (i.e., Mill Creek and the Green River at Foster Links). Total LPAH and HPAH concentrations are presented in Table 21, but are not discussed further due to low frequency of detection of individual PAH compounds in both studies.

Overall mean concentrations of total and dissolved arsenic were within about a factor of two between the studies. The overall mean of baseflow total PCBs were also similar between the studies (Table 21). When compared by land use type, most chemical concentrations were less than a factor of two between the studies, with a few exceptions. During baseflow conditions, dissolved arsenic concentrations in the largely residential and commercial basins, as well as total arsenic concentrations in residential basins were about three times greater on average in the Puyallup/Snohomish study. Also, PCB concentrations tended to be lower by landuse in the Green River study compared to the Puyallup/Snohomish study, with the exception of baseflow in commercial basins (Table 21). If the elevated PCB concentration in the one Soos Creek baseflow sample is not included, the average total PCB concentration including both Soos and Newaukum creeks of 123 pg/L would be similar to the residential basin average of 192 pg/L from the other two river systems.

Overall, this comparison suggests that arsenic and PCB concentrations in the Green River study area are generally within the range or lower than those detected in two other regional watersheds. In both studies, individual PAH detection frequencies were low. PAH detection limits for this Green River study were lower [12] and therefore more low level

[12] PAH Reporting limits ranged from 0.0097 to 0.034 µg/L in Ecology study compared to detection limits of 0.00014 to 0.00095 µg/L in this Green River Study.

detections were included in the LPAH and/or HPAH sums. This resulted in somewhat higher mean concentrations for some Green River study locations. Table 21 summarizes average chemical concentrations by study and basin type.

Table 21. Comparison of Mean Contaminant Concentrations in the Green River and its major tributaries to Other Regional River Basins

Study	Location	Number of Samples		Total Arsenic (µg/L)		Dissolved Arsenic (µg/L)		LPAHs (ug/L)		HPAHs (µg/L)		PCB (pg/L)	
		Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm	Base	Storm
Green River Averages (Current Study)	Green River – Flaming Geyser	3	6	0.804	0.54 J	0.797	0.42 J	0.010 J	0.048 J	n/d	0.0014 J	79.8 J	84.1 J
	Newaukum Creek[a]	3	6	0.647	0.50 J	0.641	0.47 J	0.012 J	0.024 J	n/d	0.0013 J	177 J	87.8 J
	Soos Creek[a]	3	6	1.05	0.682	1.00	0.58 J	0.054 J	0.030 J	n/d	0.0012 J	1,590 J	93.3 J
	Mill Creek	3	6	0.802	1.05	0.714	0.676	0.0082 J	0.051 J	0.00210 J	0.012 J	110 J	278 J
	Black River	3	6	0.838	0.868	0.49 J	0.60 J	0.019 J	0.037 J	0.0101 J	0.065 J	261 J	940 J
	Green River – Foster Links	3	6	0.966	0.964	0.709	0.43 J	0.025 J	0.034 J	0.0013 J	0.011 J	84.9 J	161 J
	Overall Average	-	-	0.851	0.77 J	0.73 J	0.53 J	**0.021 J**	**0.037 J**	0.0045 J	0.015 J	**384 J**	274 J
Puyallup & Snohomish Watershed Averages (Ecology 2009)	All Forested Basins	8	24 (12)	0.47	0.60	0.42	0.29	n/d	0.0071	n/d	n/d	181	207
	All Residential Basins	8	24 (12)	1.94	0.99	2.03	0.81	n/d	0.0085	n/d	0.0115	192	408
	All Commercial Basins	6	24 (12)	1.44	0.99	1.46	0.71	0.007	0.0238	0.0085	0.179	626	5714
	All Agricultural Basins	8	24 (4)	1.37	1.42	1.24	1.09	n/d	0.0071	n/d	0.0066	288	320
	Overall Average	**-**	**-**	**1.31**	**1.00**	**1.29**	**0.73**	0.007	0.0116	**0.0085**	**0.0657**	322	**1662**

Bolded values signify higher mean between studies. Sample numbers in parenthesis are for PCB analysis only. Ecology Study samples were a single grab for baseflow and up to two grabs for storm events; Green River study samples were 12-24 hr composite samples.
Light green shading signifies over 90% forested land use; yellow shading signifies over 50% residential and less than 10% commercial/industrial land use; pink shading signifies over 30% commercial/industrial land use; dark green shading signifies over 50% agriculture; dark grey shading signifies mixed land use.
[a] Greater than 45% residential land use. J = value estimated

7.5 Other Findings

While this study did not include a detailed assessment of the influence of significant water releases at the Howard Hansen dam on the parameters analyzed in this study, some general observations can be made. During the various sample collection periods, the largest water releases (>2,000 cfs) from the dam occurred on 1/31/2012 and 2/24/2012. Some of the highest TSS concentrations were detected in samples collected from the two Green River main stem locations on these dates; the highest total arsenic concentrations were also detected in samples from the Foster Links location on these dates. However, this pattern was not observed for the other parameters evaluated; there were no differences based on significant dam releases in dissolved arsenic or HPAH concentrations at either Green River location, or in total arsenic at the Flaming Geyser location. Total PCBs at the Flaming Geyser location tended to be lower during the storms with significant dam releases. There was no consistent pattern for TOC, DOC, and LPAHs at either Green River location, as well as total PCBs at the Foster Links location. These compounds were elevated during one of the two significant water release periods, but not during the other release period. These findings suggest that higher flow associated with dam releases does not always correspond with higher contaminant concentrations, although it may result in higher TSS. Inputs from local storm water runoff, in addition to the volume and intensity of rainfall must also be considered. In previous sampling efforts conducted during the LDW RI, a dry season storm event was captured (as opposed to the current study where storm events were collected only during the wet season). Total PCB concentrations detected during this dry season event were higher than in samples collected when Green River flows were elevated due to a dam release and no rainfall occurred (Windward 2010).

7.6 Key Findings, Current Sampling Efforts and Recommendations for Future Work

The major findings of this water quality study are presented below.

- Total PCB, LPAH, HPAH and TSS concentrations were generally greater during storm events than under baseflow conditions. Significant[13] differences between baseflow and storm event concentrations were observed at the Black River Pump Station for total PCBs, TSS, dissolved arsenic and HPAHs and at Newaukum, Soos, and Mill creeks combined for TSS. Dissolved arsenic differed in the tributaries where there were significantly higher concentrations during baseflow compared to storm events.

- During storm events, mean TOC and DOC concentrations were highest in Mill Creek, which were significantly higher than concentrations in the two main stem Green River locations. TSS concentrations during storm events were highest at the Green

[13] Use of the term "significant" refers to a statistically significant difference based on a statistical analysis.

River - Foster Links location, followed by Mill Creek; however, no significant differences were observed between any sites.

- During baseflow conditions, mean arsenic concentrations were within a factor of two at all sampling sites. During storm events, total and dissolved arsenic concentrations in Mill Creek were significantly higher than those detected in the two most upstream locations (Green River – Flaming Geyser and Newaukum Creek). During storm events, total arsenic concentrations in the Black River were also significantly greater than those in Newaukum Creek, as were dissolved arsenic concentrations in Mill Creek compared to the downstream Green River-Foster Links location.

- LPAH concentrations were variable across sites under both baseflow and storm event conditions and no significant differences were detected. Storm event HPAH concentrations were highest at the three most downstream locations: Mill Creek, Black River and the Green River - Foster Links location. During storm events, the highest HPAH concentrations were detected at the Black River Pump Station, which were significantly higher than concentrations measured at the three most upstream sites (Green River – Flaming Geyser, and Newaukum and Soos creeks).

- During storm events, total PCB concentrations were generally higher at the three most downstream locations: Mill Creek, Black River and the Green River - Foster Links location. PCB levels at the Black River Pump Station were significantly higher than at the Green River – Flaming Geyser site, Newaukum Creek, and Soos Creek. Under baseflow conditions, mean total PCB concentrations were highest in Soos Creek; however, elevated total PCB levels were detected in one sample and this data point greatly influenced the overall mean concentration.

- The highest concentrations of both total PCBs and total LPAHs were detected in a single baseflow sample collected from Soos Creek. Field observations at the time of sampling did not indicate any unusual conditions or elevated turbidity; however, TOC or DOC data are not available to provide additional context to help explain these findings. The laboratory QC analyses do not suggest that QC issues influenced this sample. PCBs and PAHs were analyzed by two different analytical laboratories, suggesting that these data were not influenced by laboratory error. Additional baseflow data collection would be necessary to evaluate whether these are anomalous concentrations.

- When storm event concentration data for the upstream and downstream Green River main stem locations were compared, significantly higher DOC, total arsenic and total HPAH concentrations were detected at the downstream location (Foster Links). No other significant differences were detected.

- Arsenic and total PCB concentrations in the Green River study area are within the range or lower than those observed in another study that included basins in the

Puyallup and Snohomish watersheds. In both studies, individual PAH detection frequencies were low.

- The comparison of sampling methods suggests that composite samples collected with the ISCO® autosampler deployed on the river bank are representative of conditions within the cross section of the Green River for all parameters except PCBs under baseflow conditions. The autosampler method yielded the higher PCB concentrations in both the baseflow and storm event sample pairs, with the most influential congeners including those indicative of contamination from silicone tubing (i.e., PCB-47, PCB-51, and PCB-68). After adjusting for the equipment contamination (see Section 5.6.1), storm event samples were comparable for the two methods, but baseflow samples still showed substantial differences, which could be due to environmental variability.

Collection of additional surface water data from the Green River Watershed is underway to further evaluate contaminant concentrations in the upper reaches of the Green River, both above and below the Howard Hanson Dam. Data collection from locations further upstream will provide additional water quality information from areas further removed from development and urbanization than the upstream Green River sampling location evaluated by this study (i.e., Flaming Geyser State Park). These data will allow King County to further characterize concentrations of target contaminants in areas less impacted by potential pollution sources. In addition, sample collection in the Green River during targeted storm events under periods of lower than average flow rates (e.g., during July-September) is recommended. Sample collection under these conditions will allow for further evaluation of local runoff when significant water releases from the Howard Hanson Dam are not occurring.

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Appendix A:
Chain of Custody Form

Login: P54090 | LDW Green River Loadings - Tributaries | Personnel: S. HESS / J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 9/7/2011	*Time* 1555
Received by [illegible]	*Date* 9/7/11	*Time* 1553
Sample Numbers L54090 1-3		*[All]*

Sample Number	**P54090-1**	**P54090-2**	**P54090-3**
QC Link			
Locator	**0322**	**A320**	**A315**
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK//USGS GAGING STATION ON LEFT B	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	6-SEP-11 / ~~1217~~ 1430	6-SEP-11 / 1318 ~~1318~~	6-SEP-11 / 1217
End Date/Time	7-SEP-11 / ~~1137~~ 1330	7-SEP-11 / 1230	7-SEP-11 / 1137
Time Span	24 HOURS	24 HOURS	24 HOURS
Sample Depth			
PERSONNEL	SH/JP	SH/JP	SH/JP
SAMP INFO	NEWAUKUM BASEFLOW	SOOS BASEFLOW	MILL BASEFLOW
SAMP METH	~~0104~~ 01012	~~0104~~ 01012	~~0104~~ 01012
SAMPLE CODE	C	C	C
SAMPLE UNIT (DELETED)	46	47	48
STORM/NON	N	N	N
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB
	46 SUBSAMPLES	47 SUBSAMPLES	48 SUBSAMPLES

*SPLIT @ LAB ~1540

*ADD STRM FLOW
PRE = 1.2 CFS
POST = 1.0 CFS
AVERAGE = 1.1 CFS

WG 117476
R 163860

Login: P54117 | LDW Green River Loadings - Tributaries | Personnel: SH | JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 9/8/2011	*Time* 1527
Received by [illegible]	*Date* 9/8/11	*Time* 1527
Sample Numbers L54117 1-4		*[All]*

Sample Number	P54117-1	P54117-2	P54117-3
QC Link			
Locator	0322	A320	A315
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK//USGS GAGING STATION ON LEFT B	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments PERSONNEL	SH/JP	SH/JP	SH/JP
Start Date/Time	7-SEP-11 / 1304	7-SEP-11 / 1215	7-SEP-11 / 1146
End Date/Time	8-SEP-11 / 1234	8-SEP-11 / 1145	8-SEP-11 / 1116
Time Span	24 HR COMP	24 HR COMP	24 HR COMP
Sample ~~Depth~~ METH	01012	01012	01012
Dept, Matrix, Prod S/N	N 3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	N 3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	N 3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB

PERSONNEL
SAMP INFO
SAMP METH
SAMPLE CODE
STORM/NON

*ADD STRM FLOW
PRE = 1.2 CFS
POST = 1.0 CFS
AVERAGE = 1.1 CFS

DRY, WARM WEATHER
Ø RAIN

SEE OTHER SIDE FOR -4

Login: P54117 **LDW Green River Loadings - Tributaries** **Personnel:** SH | JP

Project: 423589-330-4

Sample Number	**P54117-4**		
QC Link			
Locator	~~FL319~~ → FG319	(CHANGED IN LIMS)	
Short Loc Desc	FL319		
Locator Desc	GREEN RIVER, ~~DOWNSTREAM OF CONFLUENCE WITH BL~~ @ Flaming Geyser		
Site	STREAMS		
~~Comments~~ PERSONNEL	SH | JP		
Start Date/Time	7-SEP-11 / 1351		
End Date/Time	8-SEP-11 / 1321		
Time Span	24-HR COMP		
~~Sample Depth~~ METH	01012		
Dept, Matrix, Prod S/N	N 3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB		

Login: P54125 LDW Green River Loadings - Tributaries Personnel: SH | JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN PAYNE	*Date* 9/13/2011	*Time* 1525
Received by [illegible]	*Date* 9/13/11	*Time* 1525
Sample Numbers L54125 1, 3+4		*[All]*

Sample Number	**P54125-1**	**P54125-2**	**P54125-3**
QC Link			
Locator	**0322**	**A320**	**A315**
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK//USGS GAGING STATION ON LEFT B	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	12-SEP-11 / 1050		12-SEP-11 / 1159
End Date/Time	13-SEP-11 / 1020		13-SEP-11 / 1128
Time Span	24 HOUR	24 HOUR	24 HOUR
Sample Depth			
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB

+ STRM FLOW

PRE = 0.8 CFS
POST = 1.7 CFS
AVERAGE = 1.3 CFS

DELETE — SAMPLER FAILED

-4 ~~NEEDS~~ LOCATOR CHANGED TO FG319 BY SH

SEE OTHER SIDE FOR -4

Login: P54125

LDW Green River Loadings - Tributaries

Personnel: SH | JP

Project: 423589-330-4

Sample Number	**P54125-4** ~~CHANGE~~	LOCATOR	
QC Link			
Locator	**FL319** → FG319		
Short Loc Desc	FL319		
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	~~FA~~ FLAMING GEYSER STATE PARK	
Site	STREAMS		
Comments			
Start Date/Time	12-SEP-11 / 1020		
End Date/Time	13-SEP-11 / 0948		
Time Span	24 HOUR		
Sample Depth			
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB		

Login: P54147

LDW Green River Loadings - Main Stem

Personnel: J. Power

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by Jean Power	*Date* 9/14/2011	*Time* 1525
Received by	*Date* 9/14/11	*Time* 1525
Sample Numbers L54147 1-4		*[All]*

Sample Number	**P54147-1**	**P54147-2**	**P54147-3**
QC Link			
Locator	**FG319**	**FL319**	**PS317**
Short Loc Desc	FG319	FL319	PS317
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	BLACK RIVER AT BLACK RIVER PUMP STATION
Site	STREAMS	STREAMS	STREAMS
Comments	Green River - Flaming Geyser Park	Green River - Foster Links GC	Black River, below Pumps
Start Date/Time	13-SEP-11 / 1005	13-SEP-11 / 1417	13-SEP-11 / 1310
End Date/Time	14-SEP-11 / 0935	14-SEP-11 / 1315	14-SEP-11 / 1234
Time Span	24 Hour	24 Hour	24 Hour
Sample Depth			
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB

Login: P54147 LDW Green River Loadings - Main Stem Personnel: ______________

Project: 423589-330-4

Sample Number	**P54147-4**		
QC Link			
Locator	**A320**		
Short Loc Desc	BIG SOOS		
Locator Desc	BIG SOOS CREEK//USGS GAGING STATION 12112600		
Site	STREAMS		
Comments	Black River, below Pumps		
Start Date/Time	13-SEP-11 / 1109		
End Date/Time	14-SEP-11 / 1039		
Time Span	24 HOUR		
Sample Depth			
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB		

2 EXTRA 1 LITER AMBER

Login: P54148

LDW Green River Loadings - Main Stem

Personnel: J. Power

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by Jean Power	Date 9/15/2011	Time 1410
Received by [illegible]	Date 9-15-11	Time 1410
Sample Numbers L54148 1+2		[All]

Sample Number	P54148-1	P54148-2	
QC Link			
Locator	FL319	PS317	
Short Loc Desc	FL319	PS317	
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	BLACK RIVER AT BLACK RIVER PUMP STATION	
Site	STREAMS	STREAMS	
Comments	Green River - Foster Links GC	Black River, below Pumps	
Start Date/Time	14-SEP-11 / 1350	14-SEP-11 / 1242	
End Date/Time	15-SEP-11 / 1241	15-SEP-11 / 1156	
Time Span	24 HOURS	24 HOURS	
Sample ~~Depth~~ META	01012	01012	
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	

COND = 180 µS

COMPOSITES →

Login: P54149 | LDW Green River Loadings - Main Stem | Personnel: B. BUDKA J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 9/16/2011	*Time* 1234
Received by [signature]	*Date* 9-16-11	*Time* 1234
Sample Numbers L54149 1+2		*[All]*

Sample Number	**P54149-1**	**P54149-2**	
QC Link			
Locator	**FL319**	**PS317**	
Short Loc Desc	FL319	PS317	
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	BLACK RIVER AT BLACK RIVER PUMP STATION	
Site	STREAMS	STREAMS	
Comments	Green River - Foster Links GC	Black River, below Pumps	
Start Date/Time	15-SEP-11 / 1252	15-SEP-11 / 1201	
End Date/Time	16-SEP-11 / 1120	16-SEP-11 / 1030	
Time Span	24 HOURS	24 HOURS	
Sample Depth			
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL 10 LK EPA1668PCB	

47 SUBSAMPLES →

3'

SPLIT @ 1220

3 1/3 1 L.
AMBER BOTTLES

Login: P54681 LDW Green River Loadings - Storm Personnel: J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	Date 11/17/2011	Time 1720
Received by [signature]	Date 11-17-11	Time 1720
Sample Numbers L54681 1-4		[All]

Sample Number	P54681-1	P54681-2	P54681-3
QC Link			
Locator	PS317	A320	A315
Short Loc Desc	PS317	BIG SOOS	MILL CR
Locator Desc	BLACK RIVER AT BLACK RIVER PUMP STATION	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	16-NOV-11 / 1300	16-NOV-11 / 1343	16-NOV-11 / 1315
End Date/Time	17-NOV-11 / 1230	17-NOV-11 / 1128	17-NOV-11 / 1050
Time Span	24 HOURS	24 HOURS	23 HOURS
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP INFO	BLACK RIVER P.S. 48 SUBS	BIG SOOS 31 SUBS	MILL CREEK 48 SUBS
SAMP METH	01012	01011	01011
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB
	48 SUBSAMPLES	31 SUBSAMPLES	48 SUBSAMPLES

~ .65" OF RAIN OVER SAMPLING PERIOD

* SEE OTHER SIDE → FOR -4

Login: P54681 | LDW Green River Loadings - Storm | Personnel: JP

Project: 423589-330-4

Sample Number	**P54681-4**		
QC Link			
Locator	**FL319**		
Short Loc Desc	FL319		
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL		
Site	STREAMS		
Comments			
Start Date/Time	16-NOV-11 / 1300		
End Date/Time	17-NOV-11 / 1230		
Time Span	24 HOURS		
Sample Depth			
PERSONNEL	JP		
SAMP INFO	FOSTER LINES 39 SUBS		
SAMP METH	01012		
SAMPLE CODE	C		
STORM/NON	S		
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB		

24 HOURS, BUT
MISSED 9
SUBSAMPLES FROM
0230 - 0630
BECAUSE OF LOW
TIDE?

48
-9
39

Login: P54686 | LDW Green River Loadings - Storms | Personnel: J. Power

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by Jean Power	*Date* 2/1/2012	*Time* 1625
Received by [illegible]	*Date* 2/1/12	*Time* 1625
Sample Numbers 54686 3-5		*[All]*

Sample Number	**P54686-1**	**P54686-2**	**P54686-3**
QC Link			
Locator	**0322**	**A320**	**A315**
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	31-JAN-12/2330	31-JAN-12/ ~~20015~~ 2015	31-JAN-12/2001
End Date/Time	2-FEB-12/1215	1-FEB-12/2115	31-JAN-12/2124
Time Span	36 HR	25 HR	2 HR
Sample Depth			
PERSONNEL	JD/JP	JD/JP	JP
SAMP INFO	51 SUBSAMPLES (2 PROGRAMS)	48 SUBSAMPLES	48 SUBSAMPLES
SAMP METH	01011	01011	01011.
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB
	51 SUBSAMPLES	48 SUBSAMPLES	48 SUBSAMPLES

* - 1, 2 + 6 WILL BE PICKED UP 2/2/2012... PLEASE DO NOT DELETE

CHAIN OF CUSTODY
Jean Power 2/2/12 1505
[illegible] 2/2/12 1502
Sample Numbers 54686 1, 2 + 6 [All]

Login: P54686 LDW Green River Loadings - Storms **Personnel:** JP

Project: 423589-330-4

Sample Number	**P54686-4**	**P54686-5**	**P54686-6**
QC Link			
Locator	**FG319**	**PS317**	**FL319**
Short Loc Desc	FG319	PS317	FL319
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	BLACK RIVER AT BLACK RIVER PUMP STATION	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments			WATER LEVEL DOWN ~3 FT.
Start Date/Time	31-JAN-12/2000	31-JAN-12/1500	31-JAN-12/2000
End Date/Time	1-FEB-12/1300	1-FEB-12/1430	1-FEB-12/?
Time Span	~~24 HR~~ 18 HR	24 HR	~18 HR
Sample Depth			ISCO CONTROLLER PROB-- COULD NOT REVIEW
PERSONNEL	JP	JP	JD / JP
SAMP INFO	37 SUBSAMPLES - PRESSURE WASHING BRIDGE	46 SUBSAMPLES FISH LADDER SHUT DOWN	~30 SUBSAMPLES - ISCO KEYPAD PROBLEM
SAMP METH	01012	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 7 LG PCB-SIM-LVI-LL 10 LG EPA1668PCB

37 SUBSAMPLES 46 SUBSAMPLES ~30 SUBSAMPLES

SHORT ON VOLUME - SAMPLER INTAKE LINE OUT OF WATER AT TIME OF PICK UP.

1 ORGANICS BOTTLE

NO DISSOLVED METALS BOTTLE

TSS BOTTLE HALF FILLED

Login: P55077 | LDW Green River Loadings - Storms | Personnel: J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEN POWER	***Date*** 2/25/2012	***Time*** 1700
Received by [illegible]	***Date*** 2/27/12	***Time*** 0900
Sample Numbers P55077 1, 2, 4 + 6		***[All]***

Sample Number	**P55077-1**	**P55077-2**	**P55077-3**
QC Link			
Locator	**0322**	**A320**	**A315**
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON 244TH	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	24-FEB-12/1030	24-FEB-12/1015	
End Date/Time	25-FEB-12/1135	25-FEB-12/0745	
Time Span	25 HR	22 HR	
Sample Depth			
PERSONNEL	JP	JP	
SAMP INFO	124 CFS AT P/U, ~.45" RAIN	384 CFS AT P/U, ~.45" RAIN	
SAMP METH	01011	01011	
SAMPLE CODE	C	C	
STORM/NON	S	S	
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

33 SUBSAMPLES
124 CFS - PICKUP

48 SUBSAMPLES
384 CFS

~.45" RAIN OVER
SAMPLING PERIOD

NOT COLLECTED
SAMPLER + FLOW
METER FLOODED

Login: P55077 LDW Green River Loadings - Storms Personnel: JP

Project: 423589-330-4

Sample Number	**P55077-4**	**P55077-5**		**P55077-6**
QC Link				
Locator	**FG319**	**PS317**		**FL319**
Short Loc Desc	FG319	PS317		FL319
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	BLACK RIVER AT BLACK RIVER PUMP STATION		GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS		STREAMS
Comments				
Start Date/Time	24-FEB-12/ 1000			24-FEB-12/ 1200
End Date/Time	25-FEB-12/ 0930			25-FEB-12/ 1130
Time Span	24 HR			24 HR
Sample Depth				
PERSONNEL	JP	JP		JP
SAMP INFO	~ .45" RAIN			~ .4" RAIN
SAMP METH	01012			01012
SAMPLE CODE	C			C
STORM/NON	S	S		S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB		3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

48 SUBSAMPLES 48 SUBSAMPLES

SAMPLER FAILED AFTER A FEW SUBSAMPLES

Login: P55177 LDW Green River Loadings - Storms Personnel: J. Power

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 3/6/2012	*Time* 1627
Received by KM Q	*Date* 3/6/2012	*Time* 1627
Sample Numbers L55177 1,2,4-6		*[All]*

Sample Number	**P55177-1**	**P55177-2**	**P55177-3**
QC Link			
Locator	**0322**	**A320**	**A315**
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BIDGE ON	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	5-MAR-12 / 1030	5-MAR-12 / 1015	
End Date/Time	6-MAR-12 / 1204	6-MAR-12 / 0215	
Time Span	26 HR	17 HR	
Sample Depth			
PERSONNEL	JP	JP	
SAMP INFO	~.35" RAIN	~.35" RAIN	
SAMP METH	01011	01011	
SAMPLE CODE	C	C	
STORM/NON	S	S	
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

46 SUBS

DELETE - SAMPLER NOT SET UP

SPLIT AT 1536-1600
SH/JP

Login: P55177 LDW Green River Loadings - Storms Personnel: JP

Project: 423589-330-4

Sample Number	P55177-4	P55177-5	P55177-6
QC Link			
Locator	FG319	PS317	FL319 FOSTER
Short Loc Desc	FG319	PS317	FL319 LINKS
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	BLACK RIVER AT BLACK RIVER PUMP STATION	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	5-MAR-12/1200	5-MAR-12/1200	5-MAR-12/1200
End Date/Time	6-MAR-12/1130	6-MAR-12/1030	6-MAR-12/0915
Time Span	24 HR	23 HR	22 HR
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP INFO	~.35" RAIN	~.3" RAIN	~.3" RAIN
SAMP METH	01012	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB
	48 SUBS	46 SUBS	44 SUBS

Login: P55283 Green River PCB Storm- March 10 2012 Personnel: J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 3/11/2012	*Time* 1650
Received by [illegible]	*Date* 3/12/11	*Time* 0855
Sample Numbers L55283 1-4+6		*[All]*

Sample Number	P55283-1	P55283-2	P55283-3
QC Link			
Locator	0322	A320	A315
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON 212TH	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	10-MAR-12/ 0415	10-MAR-12/ 0415	10-MAR-12/ 0444 2A
End Date/Time	11-MAR-12/ 0330	10-MAR-12/ 2200	11-MAR-12/ 1040
Time Span	24 HR	19 HR	30 HR
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP INFO	APPROX. .5" RAIN	APPROX. .5" RAIN	APPROX. .5" RAIN
SAMP METH	~~E~~ JP 01011	01011	01011
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

~~~1" RAIN~~ ~.5" RAIN ~.5" RAIN 42 SUBS

UP + MUDDY

~.5" RAIN

* SPLIT DONE 1530-1630 SH/JP

ISCO SAMPLE END TIMES
NOT ADJUSTED FOR D.S.T.
~~~

Login: P55283 Green River PCB Storm- March 10 2012 Personnel: JP

Project: 423589-330-4

Sample Number	P55283-4	P55283-5	P55283-6
QC Link			
Locator	FG319	PS317	FL319
Short Loc Desc	FG319	PS317	FL319
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	BLACK RIVER AT BLACK RIVER PUMP STATION	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	10-MAR-12 / 0400		10-MAR-12 / 0400
End Date/Time	11-MAR-12 / 0330		11-MAR-12 / 0330
Time Span	24 HR		24 HR
Sample Depth			
PERSONNEL	JP		JP
SAMP INFO	APPROX. .5" RAIN		APPROX. .5" RAIN
SAMP METH	01012		01012
SAMPLE CODE	C		C
STORM/NON	S		S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

~ .5" RAIN

DELETE - SAMPLER FAILED

~ .5" RAIN

Login: P55284 | LDW Green River Loadings - Storms | Personnel: J. POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 3/21/2012	*Time* 1655
Received by Z C	*Date* 3/21/12	*Time* 1655
Sample Numbers L 55284 1-6		[All]

Sample Number	P55284-1	P55284-2	P55284-3
QC Link			
Locator	0322	A320	A315
Short Loc Desc	NEWAK CR	BIG SOOS	MILL CR
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON	BIG SOOS CREEK//USGS GAGING STATION 12112600	HILL CREEK (MILL)//BRIDGE AT 68TH AND S 261ST
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	20-MAR-12/0456	20-MAR-12/0429	20-MAR-12/0413
End Date/Time	21-MAR-12/1228	21-MAR-12/0259	20-MAR-12/1656
Time Span	32 HR	23 HR	13 HR
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP INFO	130 CFS AT PIU ~.8" RAIN	412 CFS AT PIU ~.5" RAIN	~.32" RAIN
SAMP METH	01011	01011	01011
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

130 CFS 3/21 ~.8" RAIN | 412 CFS 3/21 ~.5" RAIN | ~.32" RAIN

Login: P55284

LDW Green River Loadings - Storms

Personnel: JP

Project: 423589-330-4

Sample Number	P55284-4	P55284-5	P55284-6
QC Link			
Locator	FG319	PS317	FL319
Short Loc Desc	FG319	PS317	FL319
Locator Desc	GREEN RIVER, FLAMING GEYSER SP, UPSTREAM OF N	BLACK RIVER AT BLACK RIVER PUMP STATION	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments			
Start Date/Time	20-MAR-12/0400	20-MAR-12/0400	20-MAR-12/0400
End Date/Time	21-MAR-12/0330	21-MAR-12/0330	21-MAR-12/0330
Time Span	24 HR	24 HR	24 HR
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP INFO	~ .8" RAIN	~ .3" RAIN	~ .3" RAIN
SAMP METH	01012	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

~ .8" RAIN ~ .3" RAIN ~ .3" RAIN

Login: P55384 | LDW Green River Loadings - Storms | Personnel: J POWER

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by JEAN POWER	*Date* 3/30/2012	*Time* 1650
Received by [illegible]	*Date* 3/30/12	*Time* 1650
Sample Numbers L55384 1-4		*[All]*

Sample Number	P55384-1	P55384-2	P55384-3
QC Link			
Locator	TEMP A315	~~TEMP~~ BS317	~~TEMP~~ FG319
Short Loc Desc	TEMPLOC	TEMPLOC	TEMPLOC F
Locator Desc	TEMPORARY LOCATOR	TEMPORARY LOCATOR	TEMPORARY LOCATOR
Site	TEMP	TEMP	TEMP
Comments			
Start Date/Time	29-MAR-12/1132	29-MAR-12/1100	29-MAR-12/1100
End Date/Time	30-MAR-12/0749	30-MAR-12/1030	30-MAR-12/1030
Time Span	~~22~~ 21 HR JP	24 HR	24 HR
Sample Depth			
PERSONNEL	JP	JP	JP
SAMP FUNC	S	S	S
SAMP INFO	MILL CREEK ~1.3" RAIN	BLACK RIVER ~1" RAIN	FLAMING GEYSER ~1" RAIN
SAMP METH	01011	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

QC BOTTLES FILLED FROM -1

* LOGIN - PLEASE CHANGE LOCATORS IF POSSIBLE...

Login: P55384 | LDW Green River Loadings - Storms | Personnel: JP

Project: 423589-330-4

Sample Number	P55384-4	P55384-5	P55384-6
QC Link			
Locator	~~TEMP~~ FG 319	TEMP	TEMP
Short Loc Desc	TEMPLOC	TEMPLOC	TEMPLOC
Locator Desc	TEMPORARY LOCATOR	TEMPORARY LOCATOR	TEMPORARY LOCATOR
Site	TEMP	TEMP	TEMP
Comments			
Start Date/Time	29-MAR-12/1100		
End Date/Time	30-MAR-12/1030		
Time Span	24 HR		
Sample Depth	48 SUBS/ 240 ml		
PERSONNEL	JP		
SAMP FUNC	FREPC55384-3		
SAMP INFO	FLAMING GEYSER FREP ~1" RAIN		
SAMP METH	JP 01012		
SAMPLE CODE	C		
STORM/NON	S		
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB

DELETE - NEWAUKUM SAMPLER FAILED

DELETE - BLACK RIVER FREP FAILED

Login: P55434 LDW Green River Loadings - Storms Personnel: SH | JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by Jean Power	Date 11/1/12	Time 1440
Received by [illegible]	Date 11-1-12	Time 1440
Sample Numbers 1-3		[All]

Sample Number	P55434-1	P55434-2	P55434-3
QC Link		PS317	FREP @ 55434-2
Locator	~~TEMP~~ A315	~~TEMP~~ PS317	~~TEMP~~ PS317
Short Loc Desc	~~TEMPLOC~~ Mill	~~TEMPLOC~~ Black River	~~TEMPLOC~~ Black River
Locator Desc	TEMPORARY LOCATOR	TEMPORARY LOCATOR	TEMPORARY LOCATOR
Site	TEMP	TEMP	TEMP
Comments			
Start Date/Time	31-OCT-12 / 1220	31-OCT-12 / 1415	31-OCT-12 / 1415
End Date/Time	31-OCT-12 / 1719	1-NOV-12 / 1240	1-NOV-12 / 1240
Time Span	5 HRS	22 HRS	22 HRS
Sample Depth			
PERSONNEL	SH | JP	SH | JP	SH | JP
SAMP FUNC	S	S	FREP @ L55434-2
SAMP INFO	MILL CREEK 48 SUBSAMPLES	BLACK RIVER 47 SUBSAMPLES	BLACK RIVER FREP 47 SUBSAMPLES
SAMP METH	01011 FL	01012 T	01012 T
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB
	48 SUBS	47 SUBS	47 SUBS

Login: P56881 | LDW Green River Inputs Field Blank | Personnel: SH/JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by [signature]	*Date* 11/1/12	*Time* 1435
Received by [signature]	*Date* 11-1-12	*Time* 1435
Sample Numbers		*[All]*

Sample Number	**P56881-1**		
QC Link			
Locator	**FIELDBLANK**		
Short Loc Desc	FIELDBLANK		
Locator Desc	FIELD BLANK		
Site	METRO		
Comments			
Start Date/Time	10/31/12 0830		
End Date/Time			
Time Span			
Sample Depth			
PERSONNEL	SH, JP		
SAMP FUNC	Field Blank		
SAMP INFO	D.I. water pumped thru tubing into carboy, split next day		
SAMP METH DEL			
SAMPLE CODE DEL			
STORM/NON	S		
Dept, Matrix, Prod	3 LN DOC 3 LN TOC 3 LN TSS 6 LN AS-ICPMS 6 LN AS-ICPMS, DISS 7 LN PAH-SIM-LVI-LL 10 LN EPA1668PCB		

Login: P56994 LDW Green River Loadings - Storms Personnel: SH/DR

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by [signature]	Date 11/20/12	Time 1050
Received by [signature]	Date 11-20-12	Time 1050
Sample Numbers -1		[All]

Sample Number	P56994-1	P56994-2	
QC Link			
Locator	0322	0322	
Short Loc Desc	NEWAK CR	NEWAUKUM CREEK	
Locator Desc	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON 240TH	NEWAUKUM CREEK DOWNSTREAM OF BRIDGE ON 240TH	
Site	STREAMS	STREAMS	
Comments			
Start Date/Time	11/19/12 1200		
End Date/Time	11/20/12 0500		
Time Span	17 hours		
Sample Depth			
PERSONNEL	DR, SH		
SAMP FUNC	SAMP		
SAMP INFO	48 subs - 240mls each		
SAMP METH	ISCO - 01011		
SAMPLE CODE	composite		
STORM/NON	Storm		
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	

Login: P56484 LDW Green River Integrated Sampling Personnel: SH | JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by	Date	Time
JEAN POWER	13-SEP-12	1406
Received by	**Date**	**Time**
[illegible]	9-13-12	1400
Sample Numbers L56484 1-6		**[All]**

Sample Number	P56484-1	P56484-2	P56484-3
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	INTG-A	INTG-B	INTG-C
Start Date/Time	13-SEP-12/1000	13-SEP-12/1044	13-SEP-12/1123
End Date/Time	13-SEP-12/1025	13-SEP-12/1115	13-SEP-12/~~1151~~ 1145
Time Span			
Sample Depth			
CLIENT LOC	FOSTER LINKS - SCOTT BOTTLE 1	FOSTER LINKS - SCOTT BOTTLE 2	FOSTER LINKS - SCOTT BOTTLE 3
PERSONNEL	SH | JP	SH | JP	SH | JP
SAMP INFO	INTG A	INTG-B	INTG-C
SAMP METH	10041 SCOTT BOTTLE	10041	10041
SAMPLE CODE	C	C	C
STORM/NON	N	N	N
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL
	16 SAMPLES	~~17~~ 16 SAMPLES	16 SAMPLES

LOW TIDE = 0.7 AT 0930
WATER LEVEL IN RIVER LOW
DEEPEST ON WEST SIDE - ~2 m
~1 m IN MIDDLE; SHALLOWER ON EAST SIDE

Login: P56484 LDW Green River Integrated Sampling Personnel: ____________

Project: 423589-330-4

Sample Number	P56484-4	P56484-5	P56484-6
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	AS-A	AS-B	AS-C
Start Date/Time	13-SEP-12/1000	13-SEP-12/1044	13-SEP-12/1120
End Date/Time	13-SEP-12/1035	13-SEP-12/1115	13-SEP-12/1148
Time Span			
Sample Depth			
CLIENT LOC	FOSTER LINKS - AUTOSAMPLER 1	FOSTER LINKS - AUTOSAMPLER 2	FOSTER LINKS - AUTOSAMPLER 3
PERSONNEL	SH/JP	SH/JP	SH/JP
SAMP INFO	AS-A	AS-B	AS-C
SAMP METH	01012 AUTO SAMPLER	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	N	N	N
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL
	~~18~~ 17 SAMPLES	18 SAMPLES	18 SAMPLES

Login: P56869 LDW Green River Loadings - Integ. Water Personnel: SH|JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by Sean Power	*Date* 12/3/2012	*Time* 1350
Received by	*Date* 12-3-12	*Time* 1350
Sample Numbers L56869 1-6		*[All]*

Sample Number	P56869-1	P56869-2	P56869-3
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	INTG-A	INTG-B	INTG-C
Start Date/Time	3-DEC-12/1005	3-DEC-12/~~1050~~ 1050	3-DEC-12/1120
End Date/Time	3-DEC-12/1030 (25 MIN)	3-DEC-12/1115 (25 MIN)	3-DEC-12/1145 (25 MIN)
Time Span			
Sample Depth	0.5	0.5	0.5
PERSONNEL	SH/JP	SH/JP	SH/JP
SAMP FUNC	S	S	S
SAMP INFO	INTG-A; 16 SUBS	INTG-B; 16 SUBS	INTG-C; 16 SUBS
SAMP METH	10041	10041	10041
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL

16 SAMPLES 16 SAMPLES 16 SAMPLES

- OIL SHEEN ON SURFACE, CONCENTRATED ON WEST HALF OF CHANNEL
- DURING FIRST REPLICATE, INTEGRATED SAMPLING WAS COMPLETED BEFORE ISCO WAS DONE. CHANGED INTERVAL FROM 3 MIN. TO 2 MIN AFTER FIRST 10 SUBS.

Login: P56869

LDW Green River Loadings - Integ. Water

Personnel: ______________

Project: 423589-330-4

Sample Number	P56869-4	P56869-5	P56869-6
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	AS-A	AS-B	AS-C
Start Date/Time	3-DEC-12 / 1005	3-DEC-12 / 1050	3-DEC-12 / 1120
End Date/Time	3-DEC-12 / 1042 (37 MIN)	3-DEC-12 / 1115 (25 MIN)	3-DEC-12 / 1145 (25 MIN)
Time Span			
Sample Depth	0.3	0.2	0.1
PERSONNEL	SH / JP	SH / JP	SH / JP
SAMP FUNC	S	S	S
SAMP INFO	17 SUBSAMPLES / 500ml / 2 MIN	17 SUBSAMPLES / 500 ml / 2 MIN	17 SUBSAMPLES / 500 ml / 2 MIN
SAMP METH	01012	01012	01012
SAMPLE CODE	C	C	C
STORM/NON	S	S	S
Dept, Matrix, Prod	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL 10 LG EPA1668PCB	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL	3 LG DOC 3 LG TOC 3 LG TSS 6 LG AS-ICPMS 6 LG AS-ICPMS, DISS 7 LG PAH-SIM-LVI-LL

17 SAMPLES 500 ml 3, THEN 2 MINUTES APART (CHANGED PROGRAM BECAUSE INTEG. FINISHED BEFORE ISCO.	17 SAMPLES 500 ml 2 MIN.	17 SAMPLES 500 ml 2 MIN

Login: P56484 | LDW Green River Integrated Sampling | Personnel: SH | JP

Project: 423589-330-4

CHAIN OF CUSTODY

Relinquished by	*Date*	*Time*
JEAN POWER	13-SEP-12	1406
Received by	*Date*	*Time*
[illegible signature]	9-13-12	1400
Sample Numbers L56484 1-6		*[All]*

Sample Number	P56484-1	P56484-2	P56484-3
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	INTG-A	INTG-B	INTG-C
Start Date/Time	13-SEP-12/1000	13-SEP-12/1044	13-SEP-12/1123
End Date/Time	13-SEP-12/1025	13-SEP-12/1115	13-SEP-12/~~1151~~ 1145
Time Span			
Sample Depth			
CLIENT LOC	FOSTER LINKS - SCOTT BOTTLE 1	FOSTER LINKS - SCOTT BOTTLE 2	FOSTER LINKS - SCOTT BOTTLE 3
PERSONNEL	SH | JP	SH | JP	SH | JP
SAMP INFO	INTG A	INTG-B	INTG-C
SAMP METH	10041 SCOTT BOTTLE	10041	10041
SAMPLE CODE	C	C	C
STORM/NON	N	N	N
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL
	16 SAMPLES	~~17~~ 16 SAMPLES	16 SAMPLES

LOW TIDE = 0.7 AT 0930
WATER LEVEL IN RIVER LOW
DEEPEST ON WEST SIDE - ~2 m
~1 m IN MIDDLE; SHALLOWER ON EAST SIDE

Login: P56484 | LDW Green River Integrated Sampling | Personnel: ______________

Project: 423589-330-4

Sample Number	P56484-4	P56484-5	P56484-6
QC Link			
Locator	FL319	FL319	FL319
Short Loc Desc	FL319	FL319	FL319
Locator Desc	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL	GREEN RIVER, DOWNSTREAM OF CONFLUENCE WITH BL
Site	STREAMS	STREAMS	STREAMS
Comments	AS-A	AS-B	AS-C
Start Date/Time	13-SEP-12/1000	13-SEP-12/1044	13-SEP-12/1120
End Date/Time	13-SEP-12/1035	13-SEP-12/1115	13-SEP-12/1148
Time Span			
Sample Depth			
CLIENT LOC	FOSTER LINKS - AUTOSAMPLER 1	FOSTER LINKS - AUTOSAMPLER 2	FOSTER LINKS - AUTOSAMPLER 3
PERSONNEL	SH/JP	SH/JP	SH/JP
SAMP INFO	AS-A	AS-B	AS-C
SAMP METH	01012 AUTO SAMPLER	→ 01012 →	01012
SAMPLE CODE	C	C	C
STORM/NON	N	N	N
Dept, Matrix, Prod	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL	3 LK DOC 3 LK TOC 3 LK TSS 6 LK AS-ICPMS 6 LK AS-ICPMS, DISS 7 LK PAH-SIM-LVI-LL
	~~18~~ 17 SAMPLES	18 SAMPLES	18 SAMPLES

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Appendix B: Analytical Data Results

Appendix B1

Table B1-1. Conventionals, Arsenic and PAH Concentrations for Green River -Flaming Geyser (FG319) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54117-4						L54125-4					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/7/11 13:51						9/12/11 10:20					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	2.47	—	—	0.5	1	mg/L	1.96	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	6.59	—	R	0.5	1	mg/L	3.1	—	R	0.5	1	mg/L
Total Organic Carbon	6.79	—	R	0.5	1	mg/L	3.19	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.795	H	J	0.1	0.5	µg/L	0.787	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.765	—	—	0.1	0.5	µg/L	0.775	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0026	<RDL,B	U	0.00058	0.00581	µg/L	0.0022	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00091	<RDL	J	0.00029	0.00286	µg/L	0.0009	<RDL,B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00051	<RDL	J	0.00048	0.0039	µg/L	0.00025	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00095	0.00952	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00095	0.00952	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00057	0.00571	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00067	0.00667	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00049	<RDL,B	U	0.00031	0.00314	µg/L	0.00062	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.0013	<RDL	J	0.00029	0.00286	µg/L	0.00092	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0211	—	—	0.00095	0.00952	µg/L	0.0065	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.0024	<RDL,B	U	0.0003	0.00295	µg/L	0.0018	B	U	0.00015	0.00146	µg/L
Pyrene	—	<MDL	U	0.00033	0.00333	µg/L	—	<MDL	U	0.00017	0.00165	µg/L

Table B1-1. Conventionals, Arsenic and PAH Concentrations for Green River -Flaming Geyser (FG319) - Baseflow

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L54147-1
Matrix:	LK FRESH WTR
ColDate:	9/13/11 10:05
TimeSpan (hours):	24

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	1.62	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	1.79	—	R	0.5	1	mg/L
Total Organic Carbon	1.82	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.809	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.871	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0026	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00069	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0009	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00091	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.00589	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00211	B	U	0.00015	0.00146	µg/L
Pyrene	0.00047	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit R = Value rejected
RDL = Reporting Detection Limit H = Holding time exceeded
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-2. Conventionals, Arsenic and PAH Concentrations for Green River - Flaming Geyser (FG319) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L54686-4						L55077-4					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	1/31/12 20:00						2/24/12 10:00					
TimeSpan (hours):	18						24					
Sample Information:	37 aliquots						0.45" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	13.3	—	—	0.6	1.1	mg/L	52.8	—	—	1	2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	4.62	—	—	0.5	1	mg/L	2.2	—	—	0.5	1	mg/L
Total Organic Carbon	4.73	—	—	0.5	1	mg/L	2.82	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.46	<RDL,H	J	0.1	0.5	µg/L	0.3	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.556	—	—	0.1	0.5	µg/L	0.848	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00456	B	U	0.00029	0.00288	µg/L	0.00326	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.00062	<RDL,B	U	0.00014	0.00142	µg/L	0.00037	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00028	<RDL	J	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	0.00044	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.00029	<RDL	J	0.00024	0.00236	µg/L	0.00048	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0006	<RDL,B	U	0.00016	0.00156	µg/L	0.00077	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00065	<RDL,B	U	0.00014	0.00142	µg/L	0.00048	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	0.00029	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0695	J	—	0.00047	0.00472	µg/L	0.00494	B	U	0.00047	0.00472	µg/L
Phenanthrene	0.00171	B	U	0.00015	0.00146	µg/L	0.00223	B	U	0.00015	0.00146	µg/L
Pyrene	0.0008	<RDL,B	U	0.00017	0.00165	µg/L	0.00079	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-2. Conventionals, Arsenic and PAH Concentrations for Green River - Flaming Geyser (FG319) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L55177-4						L55283-4						
Matrix:	LG STORM WTR						LG STORM WTR						
ColDate:	3/5/12 12:00						3/10/12 4:00						
TimeSpan (hours):	24						24						
Sample Information:	Approx. 0.35" rain						Approx. 0.5" rain						
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	2.8	—	—	0.5	1	mg/L	1.3	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	1.82	—	—	0.5	1	mg/L	1.54	—	—	0.5	1	mg/L
Total Organic Carbon	2	—	—	0.5	1	mg/L	1.85	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.41	<RDL,H	J	0.1	0.5	µg/L	0.41	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.42	<RDL	J	0.1	0.5	µg/L	0.43	<RDL	J	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0015	<RDL,B	U	0.00029	0.00288	µg/L	0.0016	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00035	<RDL	J	0.00014	0.00142	µg/L	0.00037	<RDL	J	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00055	<RDL,B	U	0.00016	0.00156	µg/L	0.0005	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00042	<RDL	J	0.00014	0.00142	µg/L	0.00043	<RDL	J	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0937	J	—	0.00047	0.00472	µg/L	0.0436	J	—	0.00047	0.00472	µg/L
Phenanthrene	0.001	<RDL,B	U	0.00015	0.00146	µg/L	0.001	<RDL,B	U	0.00015	0.00146	µg/L
Pyrene	0.00038	<RDL,B	U	0.00017	0.00165	µg/L	0.00032	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-2. Conventionals, Arsenic and PAH Concentrations for Green River - Flaming Geyser (FG319) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55284-4						L55384-3					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/20/12 4:00						3/29/12 11:00					
TimeSpan (hours):	24						24					
Sample Information:	Approx. 0.8" rain											
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	1.62	—	—	0.5	1	mg/L	1.24	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	1.57	—	—	0.5	1	mg/L	1.24	—	—	0.5	1	mg/L
Total Organic Carbon	1.54	—	—	0.5	1	mg/L	1.51	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.511	H	J	0.1	0.5	µg/L	0.45	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.534	—	—	0.1	0.5	µg/L	0.47	<RDL	J	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0023	<RDL,B	U	0.00029	0.00288	µg/L	0.0016	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00037	<RDL,B	U	0.00014	0.00142	µg/L	0.00037	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0005	<RDL,B	U	0.00016	0.00156	µg/L	0.00046	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00036	<RDL,B	U	0.00014	0.00142	µg/L	0.00037	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0212	J	—	0.00047	0.00472	µg/L	0.056	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00089	<RDL,B	U	0.00015	0.00146	µg/L	0.00089	<RDL,B	U	0.00015	0.00146	µg/L
Pyrene	0.0004	<RDL,B	U	0.00017	0.00165	µg/L	0.00032	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-2. Conventionals, Arsenic and PAH Concentrations for Green River - Flaming Geyser (FG319) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L55384-4		**Replicate of L55384-3**			
Matrix:	LG STORM WTR					
ColDate:	3/29/12 11:00					
TimeSpan (hours):	24					
Sample Information:						
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D						
Total Suspended Solids	1.65	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	1.38	—	—	0.5	1	mg/L
Total Organic Carbon	1.45	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.46	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.47	<RDL	J	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0016	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00036	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00046	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00033	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0444	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00091	<RDL,B	U	0.00015	0.00146	µg/L
Pyrene	0.00035	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit H = Holding time exceeded
RDL = Reporting Detection Limit B = Value less than or equal to 5 times the detected blank value
J = Estimated Value B3 = Value between 5 and 10 times the blank value
U = Not detected

Table B1-3. Conventionals, Arsenic and PAH Concentrations for Newaukum Creek (0322) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54090-1						L54117-1					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/6/11 14:30						9/7/11 13:04					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D	—	—	—	—	—	—	—	—	—	—	—	—
Total Suspended Solids	1.8	—	—	0.5	1	mg/L	1.65	—	—	0.5	1	mg/L
CV SM5310-B	—	—	—	—	—	—	—	—	—	—	—	—
Dissolved Organic Carbon	12.9	—	R	0.5	1	mg/L	4.94	—	R	0.5	1	mg/L
Total Organic Carbon	12.1	—	R	0.5	1	mg/L	5.18	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A	—	—	—	—	—	—	—	—	—	—	—	—
Arsenic, Dissolved, ICP-MS	0.651	H	J	0.1	0.5	µg/L	0.636	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.668	—	—	0.1	0.5	µg/L	0.648	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM	—	—	—	—	—	—	—	—	—	—	—	—
2-Methylnaphthalene	0.0023	<RDL,B	U	0.00058	0.00581	µg/L	0.0023	<RDL,B	U	0.00058	0.00575	µg/L
Acenaphthene	0.00083	<RDL	J	0.00029	0.00286	µg/L	0.00094	<RDL	J	0.00028	0.00283	µg/L
Acenaphthylene	—	<MDL	U	0.00048	0.0039	µg/L	—	<MDL	U	0.00047	0.00387	µg/L
Anthracene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00095	0.00952	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00095	0.00952	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00057	0.00571	µg/L	—	<MDL	U	0.00057	0.00566	µg/L
Chrysene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00067	0.00667	µg/L	—	<MDL	U	0.00066	0.0066	µg/L
Fluoranthene	0.00054	<RDL,B	U	0.00031	0.00314	µg/L	0.00052	<RDL,B	U	0.00031	0.00311	µg/L
Fluorene	0.0011	<RDL	J	0.00029	0.00286	µg/L	0.0011	<RDL	J	0.00028	0.00283	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Naphthalene	0.0077	<RDL,B3	U	0.00095	0.00952	µg/L	0.007	<RDL,B3	U	0.00094	0.00943	µg/L
Phenanthrene	0.0017	<RDL,B	U	0.0003	0.00295	µg/L	0.0017	<RDL,B	U	0.00029	0.00292	µg/L
Pyrene	—	<MDL	U	0.00033	0.00333	µg/L	—	<MDL	U	0.00033	0.0033	µg/L

Table B1-3. Conventionals, Arsenic and PAH Concentrations for Newaukum Creek (0322) - Baseflow

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L54125-1
Matrix:	LK FRESH WTR
ColDate:	9/12/11 10:50
TimeSpan (hours):	24

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D	—	—	—	—	—	—
Total Suspended Solids	1.9	—	—	0.5	1	mg/L
CV SM5310-B	—	—	—	—	—	—
Dissolved Organic Carbon	2.77	—	R	0.5	1	mg/L
Total Organic Carbon	2.98	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A	—	—	—	—	—	—
Arsenic, Dissolved, ICP-MS	0.636	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.625	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM	—	—	—	—	—	—
2-Methylnaphthalene	0.0015	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00056	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00074	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00084	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0308	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00159	B	U	0.00015	0.00146	µg/L
Pyrene	—	<MDL	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value
R = Value rejected
H = Holding time exceeded

Table B1-4. Conventionals, Arsenic and PAH Concentrations for Newaukum Creek (0322) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L54686-1						L55077-1					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	1/31/12 23:30						2/24/12 10:30					
TimeSpan (hours):	36						25					
Sample Information:	51 aliquots-2 Isco programs						124 CFS at pick up time; 0.45" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	8.89	—	—	1.1	2.2	mg/L	4.33	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	7.28	—	—	0.5	1	mg/L	6.89	—	—	0.5	1	mg/L
Total Organic Carbon	8.15	—	—	0.5	1	mg/L	7.8	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.44	<RDL,H	J	0.1	0.5	µg/L	0.48	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.53	—	—	0.1	0.5	µg/L	0.44	<RDL	J	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00444	B	U	0.00029	0.0029	µg/L	0.0019	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00079	<RDL,B	U	0.00014	0.00143	µg/L	0.00046	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00066	<RDL	J	0.00024	0.00195	µg/L	0.00054	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00046	<RDL	J	0.00024	0.00238	µg/L	0.00028	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00238	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0008	<RDL	J	0.00048	0.00476	µg/L	0.00053	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00029	0.00286	µg/L	0.00029	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.00045	<RDL	J	0.00024	0.00238	µg/L	0.00043	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.00333	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0013	<RDL,B	U	0.00016	0.00157	µg/L	0.0012	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.0011	<RDL,B	U	0.00014	0.00143	µg/L	0.00067	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00238	µg/L	0.00026	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0372	B3,J	U	0.00048	0.00476	µg/L	0.0501	J	J	0.00047	0.00472	µg/L
Phenanthrene	0.00332	B	U	0.00015	0.00148	µg/L	0.00209	B	U	0.00015	0.00146	µg/L
Pyrene	0.0016	<RDL,B	UJ	0.00017	0.00167	µg/L	0.00099	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-4. Conventionals, Arsenic and PAH Concentrations for Newaukum Creek (0322) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55177-1						L55283-1					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/5/12 10:30						3/10/12 4:15					
TimeSpan (hours):	26						24					
Sample Information:	Approx. 0.35" rain						Approx. 0.5" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	3.2	—	—	0.5	1	mg/L	3.9	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	5.61	—	—	0.5	1	mg/L	4.42	—	—	0.5	1	mg/L
Total Organic Carbon	5.61	—	—	1	2	mg/L	4.69	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.46	<RDL,H	J	0.1	0.5	µg/L	0.42	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.49	<RDL	J	0.1	0.5	µg/L	0.42	<RDL	J	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0016	<RDL,B	U	0.00029	0.00288	µg/L	0.0015	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00033	<RDL	J	0.00014	0.00142	µg/L	0.00044	<RDL	J	0.00014	0.00142	µg/L
Acenaphthylene	0.00039	<RDL	J	0.00024	0.00193	µg/L	0.00051	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00055	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00035	<RDL	J	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00083	<RDL,B	U	0.00016	0.00156	µg/L	0.0008	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00047	<RDL	J	0.00014	0.00142	µg/L	0.00066	<RDL	J	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0676	J	—	0.00047	0.00472	µg/L	0.0185	J	—	0.00047	0.00472	µg/L
Phenanthrene	0.0014	<RDL,B	U	0.00015	0.00146	µg/L	0.0014	<RDL,B	U	0.00015	0.00146	µg/L
Pyrene	0.0007	<RDL,B	U	0.00017	0.00165	µg/L	0.00055	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-4. Conventionals, Arsenic and PAH Concentrations for Newaukum Creek (0322) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55284-1						L56994-1					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/20/12 4:56						11/19/12 12:00					
TimeSpan (hours):	32						17					
Sample Information:	Approx. 0.8" rain						48 aliquots; 240 mL each					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	4.1	—	—	0.5	1	mg/L	43.6	—	—	1	2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	6.62	—	—	0.5	1	mg/L	14.8	—	—	0.5	1	mg/L
Total Organic Carbon	7.33	—	—	0.5	1	mg/L	18.8	—	—	1.5	3	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.41	<RDL,H	J	0.1	0.5	µg/L	0.622	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.47	<RDL	J	0.1	0.5	µg/L	0.668	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.002	<RDL,B	U	0.00029	0.00288	µg/L	0.0019	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00033	<RDL,B	U	0.00014	0.00142	µg/L	0.00047	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	0.00069	<RDL	J	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	0.00048	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	0.00071	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00053	<RDL	J	0.00047	0.00472	µg/L	0.0019	<RDL,B	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	0.00049	<RDL,B	U	0.00028	0.00283	µg/L
Chrysene	0.00047	<RDL	J	0.00024	0.00236	µg/L	0.0006	<RDL,B	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	0.00064	<RDL,B	U	0.00033	0.0033	µg/L
Fluoranthene	0.0011	<RDL,B	U	0.00016	0.00156	µg/L	0.00204	B	U	0.00016	0.00156	µg/L
Fluorene	0.00067	<RDL,B	U	0.00014	0.00142	µg/L	0.0007	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	0.00055	<RDL,B	U	0.00024	0.00236	µg/L
Naphthalene	0.0039	<RDL,B,J	U	0.00047	0.00472	µg/L	0.00482	B	U	0.00047	0.00472	µg/L
Phenanthrene	0.00227	B	U	0.00015	0.00146	µg/L	0.00267	B	U	0.00015	0.00146	µg/L
Pyrene	—	<MDL	U	0.00017	0.00165	µg/L	0.0013	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-5. Conventionals, Arsenic and PAH Concentrations for Soos Creek (A320) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54090-2						L54117-2					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/6/11 13:18						9/7/11 12:15					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	2.6	—	—	1	2	mg/L	2.71	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	18.7	—	R	0.5	1	mg/L	4.65	—	R	0.5	1	mg/L
Total Organic Carbon	16.5	—	R	0.5	1	mg/L	4.43	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	1.04	H	J	0.1	0.5	µg/L	0.973	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.08	—	—	0.1	0.5	µg/L	0.998	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0045	<RDL,B3	U	0.00058	0.00575	µg/L	0.005	<RDL,B3	U	0.00058	0.00575	µg/L
Acenaphthene	0.00562	—	—	0.00028	0.00283	µg/L	0.00624	—	—	0.00028	0.00283	µg/L
Acenaphthylene	0.00056	<RDL	J	0.00047	0.00387	µg/L	0.0006	<RDL	J	0.00047	0.00387	µg/L
Anthracene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00094	0.00943	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00094	0.00943	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00057	0.00566	µg/L	—	<MDL	U	0.00057	0.00566	µg/L
Chrysene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00066	0.0066	µg/L	—	<MDL	U	0.00066	0.0066	µg/L
Fluoranthene	0.0012	<RDL,B	U	0.00031	0.00311	µg/L	0.0013	<RDL,B	U	0.00031	0.00311	µg/L
Fluorene	0.00355	—	—	0.00028	0.00283	µg/L	0.00374	—	—	0.00028	0.00283	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Naphthalene	0.0911	—	—	0.00094	0.00943	µg/L	0.0329	—	—	0.00094	0.00943	µg/L
Phenanthrene	0.00468	B	U	0.00029	0.00292	µg/L	0.00504	B	U	0.00029	0.00292	µg/L
Pyrene	0.00071	<RDL,B	U	0.00033	0.0033	µg/L	0.00075	<RDL,B	U	0.00033	0.0033	µg/L

Table B1-5. Conventionals, Arsenic and PAH Concentrations for Soos Creek (A320) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54147-4					
Matrix:	LK FRESH WTR					
ColDate:	9/13/11 11:09					
TimeSpan (hours):	24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D						
Total Suspended Solids	2.4	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	1.99	—	R	0.5	1	mg/L
Total Organic Carbon	2.33	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.987	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.08	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0022	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00221	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00026	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.001	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00159	B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0138	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00275	B	U	0.00015	0.00146	µg/L
Pyrene	—	<MDL	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value
R = Value rejected
H = Holding time exceeded

Table B1-6. Conventionals, Arsenic and PAH Concentrations for Soos Creek (A320) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54681-2						L54686-2					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	11/16/11 13:43						1/31/12 20:15					
TimeSpan (hours):	24						25					
Sample Information:	Big Soos- 31 aliquots						48 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	6.79	—	—	0.6	1.3	mg/L	18.4	—	—	0.5	1.1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	5.43	—	—	0.5	1	mg/L	7.06	—	—	0.5	1	mg/L
Total Organic Carbon	6.15	—	—	0.5	1	mg/L	8.44	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.777	H	J	0.1	0.5	µg/L	0.529	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.934	—	—	0.1	0.5	µg/L	0.741	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0022	<RDL,B	U	0.00029	0.00288	µg/L	0.00606	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.0017	B3	U	0.00014	0.00142	µg/L	0.00156	B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.0013	<RDL	J	0.00024	0.00193	µg/L	0.0011	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00025	<RDL	J	0.00024	0.00236	µg/L	0.001	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	0.00035	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L	0.0011	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00035	<RDL	J	0.00024	0.00236	µg/L	0.00078	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00166	B	U	0.00016	0.00156	µg/L	0.00198	B	U	0.00016	0.00156	µg/L
Fluorene	0.00158	B3	U	0.00014	0.00142	µg/L	0.00162	B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0647	J	—	0.00047	0.00472	µg/L	0.0587	J	J	0.00047	0.00472	µg/L
Phenanthrene	0.00306	B	U	0.00015	0.00146	µg/L	0.0047	B	U	0.00015	0.00146	µg/L
Pyrene	0.0012	<RDL,B	U	0.00017	0.00165	µg/L	0.00261	B	U	0.00017	0.00165	µg/L

Table B1-6. Conventionals, Arsenic and PAH Concentrations for Soos Creek (A320) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55077-2						L55177-2					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	2/24/12 10:15						3/5/12 10:15					
TimeSpan (hours):	22						17					
Sample Information:	384 CFS at pick up time; 0.45" rain						Approx. 0.35" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	6.84	—	—	0.5	1	mg/L	4	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	4.23	—	—	0.5	1	mg/L	4.17	—	—	0.5	1	mg/L
Total Organic Carbon	5.19	—	—	0.5	1	mg/L	4.41	—	—	1	2	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.54	H	J	0.1	0.5	µg/L	0.6	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.649	—	—	0.1	0.5	µg/L	0.639	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0025	<RDL,B	U	0.00029	0.00288	µg/L	0.002	<RDL,B	U	0.00029	0.003	µg/L
Acenaphthene	0.00085	<RDL,B3,J	U	0.00014	0.00142	µg/L	0.00077	<RDL	J	0.00014	0.001	µg/L
Acenaphthylene	0.00079	<RDL	J	0.00024	0.00193	µg/L	0.00067	<RDL	J	0.00024	0.002	µg/L
Anthracene	0.00034	<RDL,J	J	0.00024	0.00236	µg/L	0.00048	<RDL	J	0.00024	0.002	µg/L
Benzo(a)anthracene	—	<MDL,J	U	0.00024	0.00236	µg/L	0.00024	<RDL	J	0.00024	0.002	µg/L
Benzo(a)pyrene	—	<MDL,J	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.005	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL,J	U	0.00047	0.00472	µg/L	0.00082	<RDL	J	0.00047	0.005	µg/L
Benzo(g,h,i)perylene	0.00038	<RDL,J	J	0.00028	0.00283	µg/L	0.00034	<RDL	J	0.00028	0.003	µg/L
Chrysene	0.00041	<RDL,J	J	0.00024	0.00236	µg/L	0.00048	<RDL	J	0.00024	0.002	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.003	µg/L
Fluoranthene	0.0015	<RDL,B,J	U	0.00016	0.00156	µg/L	0.00159	B	U	0.00016	0.002	µg/L
Fluorene	0.0008	<RDL,B,J	U	0.00014	0.00142	µg/L	0.00075	<RDL	J	0.00014	0.001	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00032	<RDL,J	J	0.00024	0.00236	µg/L	0.00028	<RDL	J	0.00024	0.002	µg/L
Naphthalene	0.0446	J	J	0.00047	0.00472	µg/L	0.00664	B3,J	U	0.00047	0.005	µg/L
Phenanthrene	0.00198	B,J	U	0.00015	0.00146	µg/L	0.00194	B	U	0.00015	0.001	µg/L
Pyrene	0.0013	<RDL,B,J	U	0.00017	0.00165	µg/L	0.0012	<RDL,B	U	0.00017	0.002	µg/L

Table B1-6. Conventionals, Arsenic and PAH Concentrations for Soos Creek (A320) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55283-2						L55284-2					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/10/12 4:15						3/20/12 4:29					
TimeSpan (hours):	19						23					
Sample Information:	Approx. 0.5" rain						Approx. 0.5" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	4	—	—	0.5	1	mg/L	4.85	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	3.71	—	—	0.5	1	mg/L	4.44	—	—	0.5	1	mg/L
Total Organic Carbon	3.91	—	—	0.5	1	mg/L	4.5	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.542	H	J	0.1	0.5	µg/L	0.47	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.591	—	—	0.1	0.5	µg/L	0.539	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.002	<RDL,B	U	0.00029	0.00288	µg/L	0.0028	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.0011	<RDL	J	0.00014	0.00142	µg/L	0.00072	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00069	<RDL	J	0.00024	0.00193	µg/L	0.00059	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00035	<RDL	J	0.00024	0.00236	µg/L	0.0004	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00057	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00042	<RDL	J	0.00024	0.00236	µg/L	0.00043	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00216	B3	U	0.00016	0.00156	µg/L	0.0012	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.001	<RDL	J	0.00014	0.00142	µg/L	0.00067	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.00838	B3,J	U	0.00047	0.00472	µg/L	0.0043	<RDL,B,J	U	0.00047	0.00472	µg/L
Phenanthrene	0.00201	B	U	0.00015	0.00146	µg/L	0.0016	B	U	0.00015	0.00146	µg/L
Pyrene	0.0016	<RDL,B	U	0.00017	0.00165	µg/L	0.0011	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-7. Conventionals, Arsenic and PAH Concentrations for Mill Creek (A315) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54090-3						L54117-3					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/6/11 12:17						9/7/11 11:46					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	3.78	—	—	0.5	1	mg/L	3.78	—	—	1.1	2.2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	18.4	—	R	0.5	1	mg/L	8.43	—	R	0.5	1	mg/L
Total Organic Carbon	16.8	—	R	0.5	1	mg/L	8.34	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.733	H	J	0.1	0.5	µg/L	0.706	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.81	—	—	0.1	0.5	µg/L	0.781	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0028	<RDL,B	U	0.00058	0.00575	µg/L	0.0033	<RDL,B3	U	0.00058	0.00575	µg/L
Acenaphthene	0.0019	<RDL	J	0.00028	0.00283	µg/L	0.0017	<RDL	J	0.00028	0.00283	µg/L
Acenaphthylene	0.0012	<RDL	J	0.00047	0.00387	µg/L	0.0011	<RDL	J	0.00047	0.00387	µg/L
Anthracene	0.00078	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00094	0.00943	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00094	0.00943	µg/L	—	<MDL	U	0.00094	0.00943	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00057	0.00566	µg/L	—	<MDL	U	0.00057	0.00566	µg/L
Chrysene	0.00052	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00066	0.0066	µg/L	—	<MDL	U	0.00066	0.0066	µg/L
Fluoranthene	0.0019	<RDL,B	U	0.00031	0.00311	µg/L	0.0016	<RDL,B	U	0.00031	0.00311	µg/L
Fluorene	0.0015	<RDL	J	0.00028	0.00283	µg/L	0.0014	<RDL	J	0.00028	0.00283	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Naphthalene	0.0065	<RDL,B3	U	0.00094	0.00943	µg/L	0.00974	B3	U	0.00094	0.00943	µg/L
Phenanthrene	0.00307	B	U	0.00029	0.00292	µg/L	0.00299	B	U	0.00029	0.00292	µg/L
Pyrene	0.0014	<RDL,B	U	0.00033	0.0033	µg/L	0.0011	<RDL,B	U	0.00033	0.0033	µg/L

Table B1-7. Conventionals, Arsenic and PAH Concentrations for Mill Creek (A315) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54125-3					
Matrix:	LK FRESH WTR					
ColDate:	9/12/11 11:59					
TimeSpan (hours):	24					

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	4.4	—	—	1	2	mg/L
CV SM5310-B						
Dissolved Organic Carbon	7.74	—	R	0.5	1	mg/L
Total Organic Carbon	8.2	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.704	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.814	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.002	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.0011	<RDL,B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.0012	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00042	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.001	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00039	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.00073	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00245	B	U	0.00016	0.00156	µg/L
Fluorene	0.0012	<RDL,B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00037	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0134	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00276	B	U	0.00015	0.00146	µg/L
Pyrene	0.0016	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value
R = Value rejected
H = Holding time exceeded

Table B1-8. Conventionals, Arsenic and PAH Concentrations for Mill Creek (A315) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54681-3						L54686-3					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	11/16/11 13:15						1/31/12 20:01					
TimeSpan (hours):	23						2					
Sample Information:	Mill Creek- 48 aliquots						48 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	15.5	—	—	0.6	1.2	mg/L	10.4	—	—	0.6	1.2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	9.75	—	—	0.5	1	mg/L	9.07	—	—	0.5	1	mg/L
Total Organic Carbon	10.7	—	—	0.5	1	mg/L	9.72	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.504	H	J	0.1	0.5	µg/L	0.579	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.918	—	—	0.1	0.5	µg/L	0.855	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0032	B3	U	0.00029	0.00288	µg/L	0.00534	B	U	3E-04	0.003	µg/L
Acenaphthene	0.0014	<RDL,B3	U	0.00014	0.00142	µg/L	0.00194	B	U	1E-04	0.001	µg/L
Acenaphthylene	0.0011	<RDL	J	0.00024	0.00193	µg/L	0.00083	<RDL	J	2E-04	0.002	µg/L
Anthracene	0.0016	<RDL	J	0.00024	0.00236	µg/L	0.0015	<RDL	J	2E-04	0.002	µg/L
Benzo(a)anthracene	0.00071	<RDL	J	0.00024	0.00236	µg/L	0.0015	<RDL	J	2E-04	0.002	µg/L
Benzo(a)pyrene	0.00075	<RDL	J	0.00047	0.00472	µg/L	0.0013	<RDL	J	5E-04	0.005	µg/L
Benzo(b,j,k)fluoranthene	0.0017	<RDL	J	0.00047	0.00472	µg/L	0.0038	<RDL	J	5E-04	0.005	µg/L
Benzo(g,h,i)perylene	0.00073	<RDL	J	0.00028	0.00283	µg/L	0.0013	<RDL	J	3E-04	0.003	µg/L
Chrysene	0.0013	<RDL	J	0.00024	0.00236	µg/L	0.00256	—	—	2E-04	0.002	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	3E-04	0.003	µg/L
Fluoranthene	0.00308	B	U	0.00016	0.00156	µg/L	0.00515	B3	U	2E-04	0.002	µg/L
Fluorene	0.0013	<RDL,B3	U	0.00014	0.00142	µg/L	0.00179	B	U	1E-04	0.001	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00052	<RDL	J	0.00024	0.00236	µg/L	0.001	<RDL	J	2E-04	0.002	µg/L
Naphthalene	0.071	J	J	0.00047	0.00472	µg/L	0.0798	J	—	5E-04	0.005	µg/L
Phenanthrene	0.0026	B	U	0.00015	0.00146	µg/L	0.0051	B	U	2E-04	0.001	µg/L
Pyrene	0.00243	B	U	0.00017	0.00165	µg/L	0.00765	—	—	2E-04	0.002	µg/L

Table B1-8. Conventionals, Arsenic and PAH Concentrations for Mill Creek (A315) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55283-3						L55284-3					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/10/12 4:44						3/20/12 4:13					
TimeSpan (hours):	30						13					
Sample Information:	Approx. .5" rain						Approx. .32" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	35.2	—	—	1	2	mg/L	7.2	—	—	1	2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	8.5	—	—	0.5	1	mg/L	8.09	—	—	0.5	1	mg/L
Total Organic Carbon	9.5	—	—	0.5	1	mg/L	8.68	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.793	H	J	0.1	0.5	µg/L	0.627	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.48	—	—	0.1	0.5	µg/L	0.855	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00379	B3	U	0.00029	0.00288	µg/L	0.00311	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00285	—	—	0.00014	0.00142	µg/L	0.0013	<RDL,B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00083	<RDL	J	0.00024	0.00193	µg/L	0.00068	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.0012	<RDL	J	0.00024	0.00236	µg/L	0.0018	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00058	<RDL	J	0.00024	0.00236	µg/L	0.00054	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.00075	<RDL	J	0.00047	0.00472	µg/L	0.00067	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0023	<RDL	J	0.00047	0.00472	µg/L	0.002	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00091	<RDL	J	0.00028	0.00283	µg/L	0.00083	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.002	<RDL	J	0.00024	0.00236	µg/L	0.0015	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00377	—	—	0.00016	0.00156	µg/L	0.00243	B3	U	0.00016	0.00156	µg/L
Fluorene	0.0022	—	—	0.00014	0.00142	µg/L	0.0012	<RDL,B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00061	<RDL	J	0.00024	0.00236	µg/L	0.00061	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.00599	B3,J	U	0.00047	0.00472	µg/L	0.078	J	—	0.00047	0.00472	µg/L
Phenanthrene	0.00487	B	U	0.00015	0.00146	µg/L	0.00273	B	U	0.00015	0.00146	µg/L
Pyrene	0.00418	—	—	0.00017	0.00165	µg/L	0.00305	B3	U	0.00017	0.00165	µg/L

Table B1-8. Conventionals, Arsenic and PAH Concentrations for Mill Creek (A315) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55384-1						L55434-1					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/29/12 11:32						10/31/12 12:20					
TimeSpan (hours):	21						5					
Sample Information:							48 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	66.4	—	—	2	4	mg/L	13.9	—	—	0.5	1.1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	7.16	—	—	0.5	1	mg/L	8.98	—	—	0.5	1	mg/L
Total Organic Carbon	9.46	—	—	0.5	1	mg/L	10.1	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.689	H	J	0.1	0.5	µg/L	0.864	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.36	—	—	0.1	0.5	µg/L	0.856	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00398	B3	U	0.00029	0.00288	µg/L	0.00313	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00172	B3	U	0.00014	0.00142	µg/L	—	<MDL	U	0.00014	0.00142	µg/L
Acenaphthylene	0.001	<RDL	J	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	0.0016	<RDL	J	0.00024	0.00236	µg/L	0.0016	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00092	<RDL	J	0.00024	0.00236	µg/L	0.00052	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0012	<RDL	J	0.00047	0.00472	µg/L	0.0005	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0038	<RDL	J	0.00047	0.00472	µg/L	0.0019	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0015	<RDL	J	0.00028	0.00283	µg/L	0.00063	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.00319	—	—	0.00024	0.00236	µg/L	0.0015	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00033	<RDL	J	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00459	B3	U	0.00016	0.00156	µg/L	0.00249	B	U	0.00016	0.00156	µg/L
Fluorene	0.00182	B3	U	0.00014	0.00142	µg/L	0.0012	<RDL,B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.0012	<RDL	J	0.00024	0.00236	µg/L	0.00051	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0278	—	—	0.00047	0.00472	µg/L	0.0321	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00462	B	U	0.00015	0.00146	µg/L	0.00317	B	U	0.00015	0.00146	µg/L
Pyrene	0.00533	—	—	0.00017	0.00165	µg/L	0.00257	B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-9. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54147-3						L54148-2					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/13/11 13:10						9/14/11 12:42					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	4.24	—	—	0.5	1	mg/L	4.63	—	—	0.5	1.1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	4.37	—	R	0.5	1	mg/L	3.74	—	R	0.5	1	mg/L
Total Organic Carbon	4.45	—	R	0.5	1	mg/L	4.52	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.49	<RDL,H	J	0.1	0.5	µg/L	0.47	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.838	—	—	0.1	0.5	µg/L	0.814	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0032	B3	U	0.00029	0.00288	µg/L	0.0026	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00801	—	—	0.00014	0.00142	µg/L	0.00744	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00041	<RDL	J	0.00024	0.00193	µg/L	0.00042	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00035	<RDL	J	0.00024	0.00236	µg/L	0.00062	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00038	<RDL	J	0.00024	0.00236	µg/L	0.00039	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0005	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0017	<RDL	J	0.00047	0.00472	µg/L	0.0017	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0008	<RDL	J	0.00028	0.00283	µg/L	0.0007	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0018	<RDL	J	0.00024	0.00236	µg/L	0.0017	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00434	B3	U	0.00016	0.00156	µg/L	0.00446	B3	U	0.00016	0.00156	µg/L
Fluorene	0.00284	—	—	0.00014	0.00142	µg/L	0.00264	—	—	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00059	<RDL	J	0.00024	0.00236	µg/L	0.00051	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0231	—	—	0.00047	0.00472	µg/L	0.00923	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00404	B	U	0.00015	0.00146	µg/L	0.00401	B	U	0.00015	0.00146	µg/L
Pyrene	0.00426	—	—	0.00017	0.00165	µg/L	0.00442	—	—	0.00017	0.00165	µg/L

Table B1-9. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54149-2					
Matrix:	LK FRESH WTR					
ColDate:	9/15/11 12:01					
TimeSpan (hours):	24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D						
Total Suspended Solids	4.2	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	3.72	—	R	0.5	1	mg/L
Total Organic Carbon	4.57	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.501	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.862	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0023	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00811	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00039	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00035	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00045	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.00067	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0023	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0011	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.002	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00464	B3	U	0.00016	0.00156	µg/L
Fluorene	0.00291	—	—	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00079	<RDL	U	0.00024	0.00236	µg/L
Naphthalene	0.00653	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00401	B	U	0.00015	0.00146	µg/L
Pyrene	0.00442	—	—	0.00017	0.00165	µg/L

MDL = Method Detection Limit
R = Value rejected
RDL = Reporting Detection Limit
H = Holding time exceeded
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-10. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54681-1						L54686-5					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	11/16/11 13:00						1/31/12 15:00					
TimeSpan (hours):	24						24					
Sample Information:	Black River PS-48 aliquots						46 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	6.75	—	—	1.3	2.5	mg/L	5.68	—	—	1.1	2.3	mg/L
CV SM5310-B												
Dissolved Organic Carbon	5.42	—	—	0.5	1	mg/L	8.68	—	—	0.5	1	mg/L
Total Organic Carbon	7.05	—	—	0.5	1	mg/L	9.45	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.49	<RDL,H	J	0.1	0.5	µg/L	0.529	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.974	—	—	0.1	0.5	µg/L	0.807	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00715	—	—	0.00029	0.00288	µg/L	0.0092	B	U	0.00031	0.00305	µg/L
Acenaphthene	0.00506	—	—	0.00014	0.00142	µg/L	0.00406	B3	U	0.00015	0.0015	µg/L
Acenaphthylene	0.0016	<RDL	J	0.00024	0.00193	µg/L	0.0017	<RDL	J	0.00025	0.00205	µg/L
Anthracene	0.0016	<RDL	J	0.00024	0.00236	µg/L	0.00346	—	—	0.00025	0.0025	µg/L
Benzo(a)anthracene	0.00329	—	—	0.00024	0.00236	µg/L	0.00482	—	—	0.00025	0.0025	µg/L
Benzo(a)pyrene	0.00492	—	—	0.00047	0.00472	µg/L	0.00572	—	—	0.0005	0.005	µg/L
Benzo(b,j,k)fluoranthene	0.013	—	—	0.00047	0.00472	µg/L	0.0183	—	—	0.0005	0.005	µg/L
Benzo(g,h,i)perylene	0.00676	—	—	0.00028	0.00283	µg/L	0.00873	—	—	0.0003	0.003	µg/L
Chrysene	0.00888	—	—	0.00024	0.00236	µg/L	0.0133	—	—	0.00025	0.0025	µg/L
Dibenzo(a,h)anthracene	0.0011	<RDL	J	0.00033	0.0033	µg/L	0.0015	<RDL	J	0.00035	0.0035	µg/L
Fluoranthene	0.0147	—	—	0.00016	0.00156	µg/L	0.017	—	—	0.00017	0.00165	µg/L
Fluorene	0.00252	—	—	0.00014	0.00142	µg/L	0.00305	B	U	0.00015	0.0015	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00466	—	—	0.00024	0.00236	µg/L	0.0058	—	—	0.00025	0.0025	µg/L
Naphthalene	0.0287	J	—	0.00047	0.00472	µg/L	0.0258	B3,J	U	0.0005	0.005	µg/L
Phenanthrene	0.00682	B	U	0.00015	0.00146	µg/L	0.00984	B	U	0.00016	0.00155	µg/L
Pyrene	0.0149	—	—	0.00017	0.00165	µg/L	0.0264	—	—	0.00018	0.00175	µg/L

Table B1-10. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55177-5						L55284-5					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/5/12 12:00						3/20/12 4:00					
TimeSpan (hours):	23						24					
Sample Information:	Approx. .3" rain						Approx. .3" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	5.71	—	—	1	2	mg/L	4.6	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	5.47	—	—	0.5	1	mg/L	5.87	—	—	0.5	1	mg/L
Total Organic Carbon	6	—	—	1	2	mg/L	6.05	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.707	H	J	0.1	0.5	µg/L	0.645	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.974	—	—	0.1	0.5	µg/L	0.862	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00461	—	—	0.00029	0.00288	µg/L	0.0136	—	—	0.00029	0.00288	µg/L
Acenaphthene	0.00507	—	—	0.00014	0.00142	µg/L	0.00481	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00094	<RDL	J	0.00024	0.00193	µg/L	0.001	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00259	—	—	0.00024	0.00236	µg/L	0.0025	—	—	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.0023	<RDL	J	0.00024	0.00236	µg/L	0.0022	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0032	<RDL	J	0.00047	0.00472	µg/L	0.0027	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0107	—	—	0.00047	0.00472	µg/L	0.00866	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00423	—	—	0.00028	0.00283	µg/L	0.0039	—	—	0.00028	0.00283	µg/L
Chrysene	0.00811	—	—	0.00024	0.00236	µg/L	0.0065	—	—	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00069	<RDL	J	0.00033	0.0033	µg/L	0.00065	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.0124	—	—	0.00016	0.00156	µg/L	0.00849	—	—	0.00016	0.00156	µg/L
Fluorene	0.00297	—	—	0.00014	0.00142	µg/L	0.00238	—	—	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.0031	—	—	0.00024	0.00236	µg/L	0.00297	—	—	0.00024	0.00236	µg/L
Naphthalene	0.0131	J	—	0.00047	0.00472	µg/L	0.0327	J	—	0.00047	0.00472	µg/L
Phenanthrene	0.0069	B3	U	0.00015	0.00146	µg/L	0.00507	B	U	0.00015	0.00146	µg/L
Pyrene	0.0144	—	—	0.00017	0.00165	µg/L	0.011	—	—	0.00017	0.00165	µg/L

Table B1-10. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L55384-2						L55434-2					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/29/12 11:00						10/31/12 14:15					
TimeSpan (hours):	24						22.42					
Sample Information:							47 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	7.78	—	—	0.5	1	mg/L	6	—	—	1	2	mg/L
CV SM5310-B												
Dissolved Organic Carbon	4.97	—	—	0.5	1	mg/L	7	—	—	0.5	1	mg/L
Total Organic Carbon	6.1	—	—	0.5	1	mg/L	7.5	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.516	H	J	0.1	0.5	µg/L	0.742	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.829	—	—	0.1	0.5	µg/L	0.77	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00481	B3	U	0.00029	0.00288	µg/L	0.00329	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00296	—	—	0.00014	0.00142	µg/L	0.00209	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00099	<RDL	J	0.00024	0.00193	µg/L	0.00066	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.0024	<RDL	J	0.00024	0.00236	µg/L	0.00424	—	—	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00329	—	—	0.00024	0.00236	µg/L	0.0018	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0037	<RDL	J	0.00047	0.00472	µg/L	0.0023	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0132	—	—	0.00047	0.00472	µg/L	0.00782	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00536	—	—	0.00028	0.00283	µg/L	0.00285	—	—	0.00028	0.00283	µg/L
Chrysene	0.0102	—	—	0.00024	0.00236	µg/L	0.00569	—	—	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00089	<RDL	J	0.00033	0.0033	µg/L	0.00039	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.0134	—	—	0.00016	0.00156	µg/L	0.0079	—	—	0.00016	0.00156	µg/L
Fluorene	0.00217	B3	U	0.00014	0.00142	µg/L	0.00217	—	—	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00377	—	—	0.00024	0.00236	µg/L	0.002	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.029	—	—	0.00047	0.00472	µg/L	0.108	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00759	B3	U	0.00015	0.00146	µg/L	0.00507	B	U	0.00015	0.00146	µg/L
Pyrene	0.0182	—	—	0.00017	0.00165	µg/L	0.00881	—	—	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-10. Conventionals, Arsenic and PAH Concentrations for Black River (PS317) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L55434-3		**Replicate of L55434-2**			
Matrix:	LG STORM WTR					
ColDate:	10/31/12 14:15					
TimeSpan (hours):	22.42					
Sample Information:	47 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D						
Total Suspended Solids	6.02	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	6.88	—	—	0.5	1	mg/L
Total Organic Carbon	6.89	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.735	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.75	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0034	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00206	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00066	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00443	—	—	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.0019	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0022	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00694	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0027	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0055	—	—	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00053	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.00759	—	—	0.00016	0.00156	µg/L
Fluorene	0.00192	B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.002	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0213	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00483	B	U	0.00015	0.00146	µg/L
Pyrene	0.00868	—	—	0.00017	0.00165	µg/L

Table B1-11. Conventionals, Arsenic and PAH Concentrations for Green River - Foster Links - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54147-2						L54148-1					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/13/11 14:17						9/14/11 13:50					
TimeSpan (hours):	24						24					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	2.89	—	—	0.5	1	mg/L	4.95	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	6.51	—	R	0.5	1	mg/L	2.04	—	R	0.5	1	mg/L
Total Organic Carbon	6.33	—	R	0.5	1	mg/L	2.46	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.728	H	J	0.1	0.5	µg/L	0.706	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.04	—	—	0.1	0.5	µg/L	0.941	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0028	<RDL,B	U	0.00029	0.00288	µg/L	0.00324	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.00272	—	—	0.00014	0.00142	µg/L	0.00257	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00037	<RDL	J	0.00024	0.00193	µg/L	0.00038	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L	0.00036	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0012	<RDL,B	U	0.00016	0.00156	µg/L	0.0011	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00183	B3	U	0.00014	0.00142	µg/L	0.00159	B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0325	—	—	0.00047	0.00472	µg/L	0.0342	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.00309	B	U	0.00015	0.00146	µg/L	0.00283	B	U	0.00015	0.00146	µg/L
Pyrene	0.00071	<RDL,B	U	0.00017	0.00165	µg/L	—	<MDL	U	0.00017	0.00165	µg/L

Table B1-11. Conventionals, Arsenic and PAH Concentrations for Green River - Foster Links - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L54149-1
Matrix:	LK FRESH WTR
ColDate:	9/15/11 12:52
TimeSpan (hours):	24

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	3.96	—	—	1.1	2.2	mg/L
CV SM5310-B						
Dissolved Organic Carbon	2.09	—	R	0.5	1	mg/L
Total Organic Carbon	2.89	—	R	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.692	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.916	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0024	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00251	—	—	0.00014	0.00142	µg/L
Acenaphthylene	0.00036	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00048	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00028	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.001	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00162	B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.00856	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00249	B	U	0.00015	0.00146	µg/L
Pyrene	0.00072	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value
R = Value rejected
H = Holding time exceeded

Table B1-12. Conventionals, Arsenic and PAH Concentrations for Green River - Foster Links (FL319) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L54681-4						L54686-6					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	11/16/11 13:00						1/31/12 20:00					
TimeSpan (hours):	24						18					
Sample Information:	Foster Links-39 aliquots						30 aliquots?-Isco keypad problem					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	12.5	—	—	0.5	1	mg/L	52.9	—	—	0.9	1.7	mg/L
CV SM5310-B												
Dissolved Organic Carbon	2.45	—	—	0.5	1	mg/L	5.73	—	—	0.5	1	mg/L
Total Organic Carbon	2.84	—	—	0.5	1	mg/L	7.01	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.41	<RDL,H	J	0.1	0.5	µg/L	0.45	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.691	—	—	0.1	0.5	µg/L	1.24	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0028	<RDL,B3	U	0.00029	0.00288	µg/L	0.00755	B	U	0.00031	0.00305	µg/L
Acenaphthene	0.00099	<RDL,B	U	0.00014	0.00142	µg/L	0.0015	<RDL,B	U	0.00015	0.0015	µg/L
Acenaphthylene	0.00082	<RDL	J	0.00024	0.00193	µg/L	0.00073	<RDL	J	0.00025	0.00205	µg/L
Anthracene	0.00034	<RDL	J	0.00024	0.00236	µg/L	0.00062	<RDL	J	0.00025	0.0025	µg/L
Benzo(a)anthracene	0.00068	<RDL	J	0.00024	0.00236	µg/L	0.002	<RDL	J	0.00025	0.0025	µg/L
Benzo(a)pyrene	0.00089	<RDL	J	0.00047	0.00472	µg/L	0.0021	<RDL	J	0.0005	0.005	µg/L
Benzo(b,j,k)fluoranthene	0.0027	<RDL	J	0.00047	0.00472	µg/L	0.00652	—	—	0.0005	0.005	µg/L
Benzo(g,h,i)perylene	0.0015	<RDL	J	0.00028	0.00283	µg/L	0.003	<RDL	J	0.0003	0.003	µg/L
Chrysene	0.0019	<RDL	J	0.00024	0.00236	µg/L	0.00443	—	—	0.00025	0.0025	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	0.00044	<RDL	J	0.00035	0.0035	µg/L
Fluoranthene	0.00364	B3	U	0.00016	0.00156	µg/L	0.00513	B3	U	0.00017	0.00165	µg/L
Fluorene	0.00096	<RDL,B	U	0.00014	0.00142	µg/L	0.00156	B	U	0.00015	0.0015	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00097	<RDL	J	0.00024	0.00236	µg/L	0.002	<RDL	J	0.00025	0.0025	µg/L
Naphthalene	0.0332	J	—	0.00047	0.00472	µg/L	0.0927	J	—	0.0005	0.005	µg/L
Phenanthrene	0.00302	B	U	0.00015	0.00146	µg/L	0.00565	B	U	0.00016	0.00155	µg/L
Pyrene	0.00328	B3	U	0.00017	0.00165	µg/L	0.00982	—	—	0.00018	0.00175	µg/L

Table B1-12. Conventionals, Arsenic and PAH Concentrations for Green River - Foster Links (FL319) Storm Events

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L55077-6						L55177-6					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	2/24/12 12:00						3/5/12 12:00					
TimeSpan (hours):	24						22					
Sample Information:	0.4" rain						Approx. 0.3" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	102	—	—	1	2	mg/L	21.3	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	2.44	—	—	0.5	1	mg/L	2.4	—	—	0.5	1	mg/L
Total Organic Carbon	3.9	<RDL	—	2.5	5	mg/L	3.17	—	—	1	2	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.37	<RDL,H	J	0.1	0.5	µg/L	0.46	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	1.71	—	—	0.1	0.5	µg/L	0.896	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00402	B3	—	0.00029	0.00288	µg/L	0.003	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.00065	<RDL,B	—	0.00014	0.00142	µg/L	0.001	<RDL	J	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	—	0.00024	0.00193	µg/L	0.00033	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00039	<RDL	—	0.00024	0.00236	µg/L	0.0004	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	—	0.00024	0.00236	µg/L	0.00092	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.00054	<RDL	—	0.00047	0.00472	µg/L	0.001	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0014	<RDL	—	0.00047	0.00472	µg/L	0.0027	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00089	<RDL	—	0.00028	0.00283	µg/L	0.0011	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0011	<RDL	—	0.00024	0.00236	µg/L	0.0017	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	—	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00185	B	—	0.00016	0.00156	µg/L	0.00353	—	—	0.00016	0.00156	µg/L
Fluorene	0.00086	<RDL,B	—	0.00014	0.00142	µg/L	0.0011	<RDL	J	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00054	<RDL	—	0.00024	0.00236	µg/L	0.00074	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.00792	B3	—	0.00047	0.00472	µg/L	0.00986	J	—	0.00047	0.00472	µg/L
Phenanthrene	0.00307	B	—	0.00015	0.00146	µg/L	0.00282	B	U	0.00015	0.00146	µg/L
Pyrene	0.00198	B	—	0.00017	0.00165	µg/L	0.00317	B3	U	0.00017	0.00165	µg/L

Table B1-12. Conventionals, Arsenic and PAH Concentrations for Green River - Foster Links (FL319) Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L55283-6						L55284-6					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	3/10/12 4:00						3/20/12 4:00					
TimeSpan (hours):	24						24					
Sample Information:	Approx. 0.5" rain						Approx. 0.3" rain					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	6.9	—	—	0.5	1	mg/L	8.5	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	2.47	—	—	0.5	1	mg/L	3.31	—	—	0.5	1	mg/L
Total Organic Carbon	2.68	—	—	0.5	1	mg/L	3.41	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.41	<RDL,H	J	0.1	0.5	µg/L	0.47	<RDL,H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.591	—	—	0.1	0.5	µg/L	0.655	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0034	B3	U	0.00029	0.00288	µg/L	0.00466	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00166	—	—	0.00014	0.00142	µg/L	0.0012	<RDL,B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00051	<RDL	J	0.00024	0.00193	µg/L	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	0.00036	<RDL	J	0.00024	0.00236	µg/L	0.00036	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00061	<RDL	J	0.00024	0.00236	µg/L	0.0004	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.00071	<RDL	J	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0021	<RDL	J	0.00047	0.00472	µg/L	0.0013	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0011	<RDL	J	0.00028	0.00283	µg/L	0.00065	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0017	<RDL	J	0.00024	0.00236	µg/L	0.001	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00302	B3	U	0.00016	0.00156	µg/L	0.00175	B	U	0.00016	0.00156	µg/L
Fluorene	0.0012	<RDL	J	0.00014	0.00142	µg/L	0.0009	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00063	<RDL	J	0.00024	0.00236	µg/L	0.00042	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0601	J	—	0.00047	0.00472	µg/L	0.00881	B,J	U	0.00047	0.00472	µg/L
Phenanthrene	0.0028	B	U	0.00015	0.00146	µg/L	0.00184	B	U	0.00015	0.00146	µg/L
Pyrene	0.00329	B3	U	0.00017	0.00165	µg/L	0.002	B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-13. Conventionals, Arsenic and PAH Concentrations for Field Blank

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56881-1
Matrix:	LN BLANK WTR
ColDate:	10/31/12 8:30
Sample Information:	D.I. water pumped through Teflon and pump tubing into carboy. Split next day.

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	—	<MDL	U	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	1.03	—	—	0.5	1	mg/L
Total Organic Carbon	1.14	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	—	<MDL,H	U	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	—	<MDL	U	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.0014	<RDL,B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00022	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	—	<MDL	U	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00066	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00041	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0434	—	J	0.00047	0.00472	µg/L
Phenanthrene	0.00184	B	U	0.00015	0.00146	µg/L
Pyrene	0.00048	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
H = Holding time exceeded
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
B = Value less than or equal to 5 times the detected blank value

Table B1-14. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Autosampler - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L56484-4						L56484-5					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/13/12 10:00						9/13/12 10:44					
TimeSpan (hours):	0.5						0.5					
Sample Information:	AS-A						AS-B					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	2.9	—	—	0.5	1	mg/L	2.73	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	1.93	—	—	0.5	1	mg/L	1.86	—	—	0.5	1	mg/L
Total Organic Carbon	2.47	—	—	0.5	1	mg/L	2.39	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.652	H	J	0.1	0.5	µg/L	0.663	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.779	—	—	0.1	0.5	µg/L	0.751	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00445	B	U	0.00029	0.00288	µg/L	0.00532	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00258	B3	U	0.00014	0.00142	µg/L	0.00297	B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.0006	<RDL	J	0.00024	0.00193	µg/L	0.00051	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00029	<RDL	J	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00053	<RDL	J	0.00047	0.00472	µg/L	0.00047	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00028	<RDL	J	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0011	<RDL,B	U	0.00016	0.00156	µg/L	0.00095	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00185	B	U	0.00014	0.00142	µg/L	0.00203	B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0178	B3	U	0.00047	0.00472	µg/L	0.0177	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00334	B	U	0.00015	0.00146	µg/L	0.00378	B	U	0.00015	0.00146	µg/L
Pyrene	0.00096	<RDL,B	U	0.00017	0.00165	µg/L	0.00067	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-14. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Autosampler - Baseflow

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56484-6
Matrix:	LK FRESH WTR
ColDate:	9/13/12 11:20
TimeSpan (hours):	0.5
Sample Information:	AS-C

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	3.51	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	1.86	—	—	0.5	1	mg/L
Total Organic Carbon	2.47	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.658	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.771	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.00455	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00293	B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00047	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00084	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00186	B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0378	—	—	0.00047	0.00472	µg/L
Phenanthrene	0.0031	B	U	0.00015	0.00146	µg/L
Pyrene	0.00063	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-15. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Autosampler - Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56869-4						L56869-5					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	12/3/12 10:05						12/3/12 10:50					
TimeSpan (hours):	0.6						0.4					
Sample Information	AS-A; 17 aliquots						AS-B; 17 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	7.4	—	—	0.5	1	mg/L	7.5	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	3.77	—	—	0.5	1	mg/L	3.57	—	—	0.5	1	mg/L
Total Organic Carbon	4.57	—	—	0.5	1	mg/L	4.51	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.58	H	J	0.1	0.5	µg/L	0.592	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.796	—	—	0.1	0.5	µg/L	0.795	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0043	B	U	0.00029	0.00293	µg/L	0.00753	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.001	<RDL,B	U	0.00014	0.00144	µg/L	0.001	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00091	<RDL	J	0.00024	0.00197	µg/L	0.00082	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.0012	<RDL	J	0.00024	0.0024	µg/L	0.001	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.0022	<RDL,B3	U	0.00024	0.0024	µg/L	0.002	<RDL,B3	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.00543	—	—	0.00048	0.00481	µg/L	0.0034	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0132	—	—	0.00048	0.00481	µg/L	0.00805	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0059	—	—	0.00029	0.00288	µg/L	0.00388	—	—	0.00028	0.00283	µg/L
Chrysene	0.00469	—	—	0.00024	0.0024	µg/L	0.00339	—	—	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.0013	<RDL	J	0.00034	0.00337	µg/L	0.00077	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.0107	—	—	0.00016	0.00159	µg/L	0.00826	—	—	0.00016	0.00156	µg/L
Fluorene	0.0011	<RDL,B	U	0.00014	0.00144	µg/L	0.0013	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00543	—	—	0.00024	0.0024	µg/L	0.00337	—	—	0.00024	0.00236	µg/L
Naphthalene	0.0149	B3	UJ	0.00048	0.00481	µg/L	0.0111	B	UJ	0.00047	0.00472	µg/L
Phenanthrene	0.00529	B	U	0.00015	0.00149	µg/L	0.0046	B	U	0.00015	0.00146	µg/L
Pyrene	0.00835	—	—	0.00017	0.00168	µg/L	0.00614	B3	U	0.00017	0.00165	µg/L

Table B1-15. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Autosampler - Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56869-6
Matrix:	LG STORM WTR
ColDate:	12/3/12 11:20
TimeSpan (hours):	0.416666667
Sample Information	AS-C; 17 aliquots

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	7.4	—	—	1	2	mg/L
CV SM5310-B						
Dissolved Organic Carbon	3.73	—	—	0.5	1	mg/L
Total Organic Carbon	4.81	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.591	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.806	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.00886	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.0011	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00069	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00071	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.0012	<RDL,B	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0017	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0046	<RDL	J	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0021	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0018	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00042	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.00498	B3	U	0.00016	0.00156	µg/L
Fluorene	0.0013	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.0019	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0363	—	J	0.00047	0.00472	µg/L
Phenanthrene	0.00387	B	U	0.00015	0.00146	µg/L
Pyrene	0.004	B3	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-16. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Cross-sectional Composite - Baseflow

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56484-1						L56484-2					
Matrix:	LK FRESH WTR						LK FRESH WTR					
ColDate:	9/13/12 10:00						9/13/12 10:44					
TimeSpan (hours):	0.5						0.5					
Sample Information:	INTG-A						INTG-B					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	3.8	—	—	1	2	mg/L	3.8	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	1.9	—	—	0.5	1	mg/L	1.98	—	—	0.5	1	mg/L
Total Organic Carbon	2.64	—	—	0.5	1	mg/L	2.17	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.637	H	J	0.1	0.5	µg/L	0.676	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.774	—	—	0.1	0.5	µg/L	0.772	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.0039	B	U	0.00029	0.0029	µg/L	0.00362	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00217	B3	U	0.00014	0.00143	µg/L	0.00218	B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00052	<RDL	J	0.00024	0.00195	µg/L	0.00048	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00238	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.00037	<RDL	J	0.00024	0.00238	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0011	<RDL	J	0.00048	0.00476	µg/L	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00044	<RDL	J	0.00029	0.00286	µg/L	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	0.00063	<RDL	J	0.00024	0.00238	µg/L	0.00028	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00045	<RDL	J	0.00033	0.00333	µg/L	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.0012	<RDL,B	U	0.00016	0.00157	µg/L	0.00096	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.00146	B	U	0.00014	0.00143	µg/L	0.0013	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00035	<RDL	J	0.00024	0.00238	µg/L	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0755	—	—	0.00048	0.00476	µg/L	0.0109	B	U	0.00047	0.00472	µg/L
Phenanthrene	0.00326	B	U	0.00015	0.00148	µg/L	0.00294	B	U	0.00015	0.00146	µg/L
Pyrene	0.00095	<RDL,B	U	0.00017	0.00167	µg/L	0.00068	<RDL,B	U	0.00017	0.00165	µg/L

Table B1-16. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Cross-sectional Composite - Baseflow

Project: 423589-330-4

King County Environmental Lab Analytical Report

Sample:	L56484-3
Matrix:	LK FRESH WTR
ColDate:	9/13/12 11:23
TimeSpan (hours):	0.5
Sample Information:	INTG-C

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	3.2	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	2.02	—	—	0.5	1	mg/L
Total Organic Carbon	2.15	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.673	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.8	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.00383	B	U	0.00029	0.00288	µg/L
Acenaphthene	0.00229	B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00045	<RDL	J	0.00024	0.00193	µg/L
Anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)anthracene	—	<MDL	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	—	<MDL	U	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	—	<MDL	U	0.00028	0.00283	µg/L
Chrysene	—	<MDL	U	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	—	<MDL	U	0.00033	0.0033	µg/L
Fluoranthene	0.00084	<RDL,B	U	0.00016	0.00156	µg/L
Fluorene	0.0015	B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	—	<MDL	U	0.00024	0.00236	µg/L
Naphthalene	0.0163	B3	U	0.00047	0.00472	µg/L
Phenanthrene	0.00285	B	U	0.00015	0.00146	µg/L
Pyrene	0.00057	<RDL,B	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected

H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Table B1-17. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Cross-sectional Composite - Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56869-1						L56869-2					
Matrix:	LG STORM WTR						LG STORM WTR					
ColDate:	12/3/12 10:05						12/3/12 10:50					
TimeSpan (hours):	0.6						0.4					
Sample Information:	INTG-A; 16 aliquots						INTG-B; 16 aliquots					
Parameters	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**	**Value**	**Lab Qualifier**	**Validation Qualifier**	**MDL**	**RDL**	**Units**
CV SM2540-D												
Total Suspended Solids	8.1	—	—	0.5	1	mg/L	7.1	—	—	0.5	1	mg/L
CV SM5310-B												
Dissolved Organic Carbon	3.8	—	—	0.5	1	mg/L	3.5	—	—	0.5	1	mg/L
Total Organic Carbon	4.05	—	—	0.5	1	mg/L	4.08	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A												
Arsenic, Dissolved, ICP-MS	0.598	H	J	0.1	0.5	µg/L	0.573	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.793	—	—	0.1	0.5	µg/L	0.801	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM												
2-Methylnaphthalene	0.00331	B	U	0.00029	0.00288	µg/L	0.00807	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.001	<RDL,B	U	0.00014	0.00142	µg/L	0.0012	<RDL,B3	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00087	<RDL	J	0.00024	0.00193	µg/L	0.00081	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.001	<RDL	J	0.00024	0.00236	µg/L	0.00091	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.002	<RDL,B3	U	0.00024	0.00236	µg/L	0.0019	<RDL,B3	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.0041	<RDL	J	0.00047	0.00472	µg/L	0.0035	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.0102	—	—	0.00047	0.00472	µg/L	0.0084	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.00528	—	—	0.00028	0.00283	µg/L	0.00428	—	—	0.00028	0.00283	µg/L
Chrysene	0.00425	—	—	0.00024	0.00236	µg/L	0.00349	—	—	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.0011	<RDL	J	0.00033	0.0033	µg/L	0.00093	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.00905	—	—	0.00016	0.00156	µg/L	0.00762	—	—	0.00016	0.00156	µg/L
Fluorene	0.0012	<RDL,B	U	0.00014	0.00142	µg/L	0.0014	<RDL,B3	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.00466	—	—	0.00024	0.00236	µg/L	0.00379	—	—	0.00024	0.00236	µg/L
Naphthalene	0.0268	B3	UJ	0.00047	0.00472	µg/L	0.0121	B	UJ	0.00047	0.00472	µg/L
Phenanthrene	0.00442	B	U	0.00015	0.00146	µg/L	0.00515	B	U	0.00015	0.00146	µg/L
Pyrene	0.00743	—	—	0.00017	0.00165	µg/L	0.00596	B3	U	0.00017	0.00165	µg/L

Table B1-17. Conventionals, Arsenic and PAH Concentrations for Method Evaluation: Cross-sectional Composite - Storm Events

Project: 423589-330-4 King County Environmental Lab Analytical Report

Sample:	L56869-3
Matrix:	LG STORM WTR
ColDate:	12/3/12 11:20
TimeSpan (hours):	0.4
Sample Information:	INTG-C; 16 aliquots

Parameters	Value	Lab Qualifier	Validation Qualifier	MDL	RDL	Units
CV SM2540-D						
Total Suspended Solids	8.1	—	—	0.5	1	mg/L
CV SM5310-B						
Dissolved Organic Carbon	3.59	—	—	0.5	1	mg/L
Total Organic Carbon	4.08	—	—	0.5	1	mg/L
MT EPA 200.8*SW846 6020A						
Arsenic, Dissolved, ICP-MS	0.582	H	J	0.1	0.5	µg/L
Arsenic, Total, ICP-MS	0.789	—	—	0.1	0.5	µg/L
OR SW846 3520C*8270D SIM						
2-Methylnaphthalene	0.00697	B3	U	0.00029	0.00288	µg/L
Acenaphthene	0.00092	<RDL,B	U	0.00014	0.00142	µg/L
Acenaphthylene	0.00044	<RDL	J	0.00024	0.00193	µg/L
Anthracene	0.00063	<RDL	J	0.00024	0.00236	µg/L
Benzo(a)anthracene	0.0011	<RDL,B	U	0.00024	0.00236	µg/L
Benzo(a)pyrene	0.002	<RDL	J	0.00047	0.00472	µg/L
Benzo(b,j,k)fluoranthene	0.00509	—	—	0.00047	0.00472	µg/L
Benzo(g,h,i)perylene	0.0023	<RDL	J	0.00028	0.00283	µg/L
Chrysene	0.0022	<RDL	J	0.00024	0.00236	µg/L
Dibenzo(a,h)anthracene	0.00057	<RDL	J	0.00033	0.0033	µg/L
Fluoranthene	0.00559	B3	U	0.00016	0.00156	µg/L
Fluorene	0.0011	<RDL,B	U	0.00014	0.00142	µg/L
Indeno(1,2,3-Cd)Pyrene	0.0021	<RDL	J	0.00024	0.00236	µg/L
Naphthalene	0.0191	B3	UJ	0.00047	0.00472	µg/L
Phenanthrene	0.00331	B	U	0.00015	0.00146	µg/L
Pyrene	0.00472	B3	U	0.00017	0.00165	µg/L

MDL = Method Detection Limit
RDL = Reporting Detection Limit
J = Estimated Value
U = Not detected
H = Holding time exceeded
B = Value less than or equal to 5 times the detected blank value
B3 = Value between 5 and 10 times the blank value

Appendix B2

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-4		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.60	B J	U	0.562
3-MoCB	2	—	1.20	B J	U	0.562
4-MoCB	3	—	2.97	B J	U	0.562
2,2'-DiCB	4	—	2.15	J	—	1.92
2,3-DiCB	5	—	—	U	—	1.73
2,3'-DiCB	6	—	—	U	—	1.56
2,4-DiCB	7	—	2.37	K B J	U	1.58
2,4'-DiCB	8	—	4.91	B J	U	1.43
2,5-DiCB	9	—	—	U	—	1.52
2,6-DiCB	10	—	—	U	—	1.5
3,3'-DiCB	11	—	30.7	B	U	1.64
3,4-DiCB	12	12 + 13	—	C U	—	1.67
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.6
4,4'-DiCB	15	—	2.58	B J	U	1.58
2,2',3-TriCB	16	—	2.75	B J	U	0.562
2,2',4-TriCB	17	—	3.10	B J	U	0.562
2,2',5-TriCB	18	18 + 30	5.00	C B J	U	0.562
2,2',6-TriCB	19	—	0.911	J	—	0.562
2,3,3'-TriCB	20	20 + 28	7.93	C B J	U	0.562
2,3,4-TriCB	21	21 + 33	4.93	C B J	U	0.562
2,3,4'-TriCB	22	—	3.72	K B J	U	0.562
2,3,5-TriCB	23	—	—	U	—	0.562
2,3,6-TriCB	24	—	—	U	—	0.562
2,3',4-TriCB	25	—	—	U	—	0.562
2,3',5-TriCB	26	26 + 29	1.19	C J	—	0.562
2,3',6-TriCB	27	—	—	U	—	0.562
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	6.69	B J	U	0.562
2,4',6-TriCB	32	—	1.55	B J	U	0.562
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.562
3,3',4-TriCB	35	—	1.42	K J	U	0.562
3,3',5-TriCB	36	—	—	U	—	0.562
3,4,4'-TriCB	37	—	3.40	B J	U	0.562
3,4,5-TriCB	38	—	—	U	—	0.562
3,4',5-TriCB	39	—	—	U	—	0.562
2,2',3,3'-TeCB	40	40 + 41 + 71	4.32	C B J	U	0.562
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.61	K B J	U	0.562
2,2',3,5-TeCB	43	—	—	U	—	0.562
2,2',3,5'-TeCB	44	44 + 47 + 65	24.6	C B	R1	0.562
2,2',3,6-TeCB	45	45 + 51	7.58	C B J	R1	0.562
2,2',3,6'-TeCB	46	—	—	U	—	0.562
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-4		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.76	K B J	U	0.562
2,2',4,5'-TeCB	49	49 + 69	5.55	C K B J	U	0.562
2,2',4,6-TeCB	50	50 + 53	0.981	C K B J	U	0.562
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	13.5	B J	—	0.562
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.562
2,3,3',4-TeCB	55	—	—	U	—	0.562
2,3,3',4'-TeCB	56	—	5.44	B J	—	0.562
2,3,3',5-TeCB	57	—	—	U	—	0.562
2,3,3',5'-TeCB	58	—	—	U	—	0.562
2,3,3',6-TeCB	59	59 + 62 + 75	0.589	C K J	U	0.562
2,3,4,4'-TeCB	60	—	2.71	B J	U	0.562
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	19.9	C B J	U	0.562
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.562
2,3,4',6-TeCB	64	—	3.45	K B J	U	0.562
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	7.88	B J	U	0.562
2,3',4,5-TeCB	67	—	—	U	—	0.562
2,3',4,5'-TeCB	68	—	11.9	J	R1	0.562
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.562
2,3',5',6-TeCB	73	—	—	U	—	0.562
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.40	B J	U	0.562
3,3',4,5-TeCB	78	—	—	U	—	0.562
3,3',4,5'-TeCB	79	—	—	U	—	0.562
3,3',5,5'-TeCB	80	—	—	U	—	0.562
3,4,4',5-TeCB	81	—	1.30	J	—	0.562
2,2',3,3',4-PeCB	82	—	2.39	B J	—	0.562
2,2',3,3',5-PeCB	83	83 + 99	9.70	C B J	—	0.562
2,2',3,3',6-PeCB	84	—	5.51	B J	U	0.562
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.20	C B J	—	0.562
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	17.0	C B J	—	0.562
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.45	C B J	—	0.562
2,2',3,4,6'-PeCB	89	—	—	U	—	0.562
2,2',3,4',5-PeCB	90	90 + 101 + 113	18.2	C B J	U	0.562
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.43	K B J	U	0.562
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	15.2	C B J	U	0.562
2,2',3,5,6'-PeCB	94	—	—	U	—	0.562

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-4		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.562
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.562
2,2',4,6,6'-PeCB	104	—	0.627	J	—	0.562
2,3,3',4,4'-PeCB	105	—	7.07	K B J	U	0.562
2,3,3',4,5-PeCB	106	—	—	U	—	0.562
2,3,3',4',5-PeCB	107	107 + 124	0.666	C K J	U	0.562
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.11	K J	U	0.562
2,3,3',4',6-PeCB	110	110 + 115	22.8	C B	U	0.562
2,3,3',5,5'-PeCB	111	—	—	U	—	0.562
2,3,3',5,6-PeCB	112	—	—	U	—	0.562
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.97	K J	U	0.562
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	15.7	B J	U	0.562
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.562
2,3',4,5',6-PeCB	121	—	—	U	—	0.562
2',3,3',4,5-PeCB	122	—	—	U	—	0.562
2',3,4,4',5-PeCB	123	—	1.66	K J	U	0.562
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.86	K J	U	0.562
3,3',4,5,5'-PeCB	127	—	—	U	—	0.562
2,2',3,3',4,4'-HxCB	128	128 + 166	2.56	C J	—	0.562
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	15.8	C B J	—	0.562
2,2',3,3',4,5'-HxCB	130	—	0.827	K B J	U	0.562
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.562
2,2',3,3',4,6'-HxCB	132	—	5.13	J	—	0.562
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.562
2,2',3,3',5,6-HxCB	134	134 + 143	0.803	C K J	U	0.562
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.36	C J	—	0.562
2,2',3,3',6,6'-HxCB	136	—	2.14	K J	U	0.562
2,2',3,4,4',5-HxCB	137	—	1.20	J	—	0.562
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.562
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.53	K J	U	0.562

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-4		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.562
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.562
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.562
2,2',3,4',5,5'-HxCB	146	—	2.30	K J	U	0.562
2,2',3,4',5,6-HxCB	147	147 + 149	12.1	C B J	—	0.562
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.562
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.562
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.562
2,2',4,4',5,5'-HxCB	153	153 + 168	12.5	C B J	—	0.562
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	0.892	K J	U	0.562
2,3,3',4,4',5-HxCB	156	156 + 157	4.99	C B J	—	0.562
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.55	J	—	0.562
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.562
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.562
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.562
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.704	K J	U	0.562
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.562
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.64	K J	U	0.562
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	1.68	K J	U	0.562
2,2',3,3',4,4',5-HpCB	170	—	3.74	B J	—	0.562
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.703	C J	—	0.562
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.562
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.83	B J	—	0.562
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.562
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.562
2,2',3,3',4',5,6-HpCB	177	—	1.20	K J	U	0.562
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.562
2,2',3,3',5,6,6'-HpCB	179	—	0.795	J	—	0.562
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.34	C B J	—	0.562
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.562
2,2',3,4,4',5,6'-HpCB	182	—	1.79	J	—	0.562
2,2',3,4,4',5',6-HpCB	183	183 + 185	3.36	C K B J	U	0.562
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.562
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.562
2,2',3,4',5,5',6-HpCB	187	—	4.89	B J	U	0.562
2,2',3,4',5,6,6'-HpCB	188	—	0.961	J	—	0.562

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-4		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	1.76	K J	U	0.562
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.562
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.562
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.562
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.24	K B J	U	0.562
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.562
2,2',3,3',4,4',5,6'-OcCB	196	—	2.36	K J	U	0.562
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.562
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.18	C K B J	U	0.562
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.562
2,2',3,3',5,5',6,6'-OcCB	202	—	1.33	K J	U	0.562
2,2',3,4,4',5,5',6-OcCB	203	—	0.773	B J	—	0.562
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.562
2,3,3',4,4',5,5',6-OcCB	205	—	1.97	J	—	0.562
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.43	J	—	1.08
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.912
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.72	J	—	0.883
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.66	B J	U	0.562
Total PCBs	—	—	142	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-4		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.18	B J	U	0.551
3-MoCB	2	—	0.974	B J	U	0.551
4-MoCB	3	—	2.41	B J	U	0.551
2,2'-DiCB	4	—	—	U	—	1.55
2,3-DiCB	5	—	—	U	—	1.39
2,3'-DiCB	6	—	—	U	—	1.26
2,4-DiCB	7	—	3.38	K B J	U	1.27
2,4'-DiCB	8	—	2.55	K B J	U	1.15
2,5-DiCB	9	—	—	U	—	1.22
2,6-DiCB	10	—	—	U	—	1.21
3,3'-DiCB	11	—	10.5	B J	U	1.32
3,4-DiCB	12	12 + 13	—	C U	—	1.34
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.29
4,4'-DiCB	15	—	1.68	B J	U	1.27
2,2',3-TriCB	16	—	1.35	K B J	U	0.551
2,2',4-TriCB	17	—	2.28	B J	U	0.551
2,2',5-TriCB	18	18 + 30	2.57	C B J	U	0.551
2,2',6-TriCB	19	—	—	U	—	0.551
2,3,3'-TriCB	20	20 + 28	4.14	C B J	U	0.551
2,3,4-TriCB	21	21 + 33	1.88	C B J	U	0.551
2,3,4'-TriCB	22	—	1.08	K B J	U	0.551
2,3,5-TriCB	23	—	—	U	—	0.551
2,3,6-TriCB	24	—	—	U	—	0.551
2,3',4-TriCB	25	—	—	U	—	0.551
2,3',5-TriCB	26	26 + 29	0.585	C J	—	0.551
2,3',6-TriCB	27	—	—	U	—	0.551
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.59	B J	U	0.551
2,4',6-TriCB	32	—	0.655	B J	U	0.551
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.551
3,3',4-TriCB	35	—	—	U	—	0.551
3,3',5-TriCB	36	—	—	U	—	0.551
3,4,4'-TriCB	37	—	1.16	B J	U	0.551
3,4,5-TriCB	38	—	—	U	—	0.551
3,4',5-TriCB	39	—	—	U	—	0.551
2,2',3,3'-TeCB	40	40 + 41 + 71	1.60	C K B J	U	0.551
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.602	B J	—	0.551
2,2',3,5-TeCB	43	—	—	U	—	0.551
2,2',3,5'-TeCB	44	44 + 47 + 65	19.2	C B J	R1	0.551
2,2',3,6-TeCB	45	45 + 51	9.26	C B J	R1	0.551
2,2',3,6'-TeCB	46	—	—	U	—	0.551
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54125-4		Collection Date: 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.551
2,2',4,5'-TeCB	49	49 + 69	2.93	C B J	U	0.551
2,2',4,6-TeCB	50	50 + 53	0.660	C B J	U	0.551
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.38	B J	—	0.551
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.551
2,3,3',4-TeCB	55	—	—	U	—	0.551
2,3,3',4'-TeCB	56	—	1.50	K B J	U	0.551
2,3,3',5-TeCB	57	—	—	U	—	0.551
2,3,3',5'-TeCB	58	—	—	U	—	0.551
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.551
2,3,4,4'-TeCB	60	—	0.896	K B J	U	0.551
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	10.6	C B J	U	0.551
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.551
2,3,4',6-TeCB	64	—	1.51	K B J	U	0.551
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.71	K B J	U	0.551
2,3',4,5-TeCB	67	—	—	U	—	0.551
2,3',4,5'-TeCB	68	—	12.1	J	R1	0.551
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.551
2,3',5',6-TeCB	73	—	—	U	—	0.551
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.665	K B J	U	0.551
3,3',4,5-TeCB	78	—	—	U	—	0.551
3,3',4,5'-TeCB	79	—	—	U	—	0.551
3,3',5,5'-TeCB	80	—	—	U	—	0.551
3,4,4',5-TeCB	81	—	—	U	—	0.551
2,2',3,3',4-PeCB	82	—	1.35	K B J	U	0.551
2,2',3,3',5-PeCB	83	83 + 99	7.03	C K B J	U	0.551
2,2',3,3',6-PeCB	84	—	4.09	B J	U	0.551
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.26	C B J	—	0.551
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	10.5	C B J	—	0.551
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.86	C B J	—	0.551
2,2',3,4,6'-PeCB	89	—	—	U	—	0.551
2,2',3,4',5-PeCB	90	90 + 101 + 113	15.5	C B J	U	0.551
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.55	B J	—	0.551
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	10.5	C B J	U	0.551
2,2',3,5,6'-PeCB	94	—	—	U	—	0.551

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-4		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.551
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.551
2,2',4,6,6'-PeCB	104	—	—	U	—	0.551
2,3,3',4,4'-PeCB	105	—	4.32	K B J	U	0.551
2,3,3',4,5-PeCB	106	—	—	U	—	0.551
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.551
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.551
2,3,3',4',6-PeCB	110	110 + 115	15.5	C B J	U	0.551
2,3,3',5,5'-PeCB	111	—	—	U	—	0.551
2,3,3',5,6-PeCB	112	—	—	U	—	0.551
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.551
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	9.93	B J	U	0.551
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.551
2,3',4,5',6-PeCB	121	—	—	U	—	0.551
2',3,3',4,5-PeCB	122	—	—	U	—	0.551
2',3,4,4',5-PeCB	123	—	—	U	—	0.551
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.551
3,3',4,5,5'-PeCB	127	—	—	U	—	0.551
2,2',3,3',4,4'-HxCB	128	128 + 166	2.71	C K J	U	0.551
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	12.6	C B J	—	0.551
2,2',3,3',4,5'-HxCB	130	—	1.31	K B J	U	0.551
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.551
2,2',3,3',4,6'-HxCB	132	—	4.34	J	—	0.551
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.551
2,2',3,3',5,6-HxCB	134	134 + 143	0.846	C J	—	0.551
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	3.40	C J	—	0.551
2,2',3,3',6,6'-HxCB	136	—	1.52	K J	U	0.551
2,2',3,4,4',5-HxCB	137	—	0.674	J	—	0.551
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.551
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.97	J	—	0.551

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-4		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.551
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.637	K J	U	0.551
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.551
2,2',3,4',5,5'-HxCB	146	—	2.36	K J	U	0.551
2,2',3,4',5,6-HxCB	147	147 + 149	9.01	C B J	U	0.551
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.551
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.551
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.551
2,2',4,4',5,5'-HxCB	153	153 + 168	9.19	C K B J	U	0.551
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.551
2,3,3',4,4',5-HxCB	156	156 + 157	2.13	C B J	—	0.551
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.74	K J	U	0.551
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.551
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.551
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.551
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.884	K J	U	0.551
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.551
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.602	K J	U	0.551
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.551
2,2',3,3',4,4',5-HpCB	170	—	1.77	K B J	U	0.551
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.551
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.551
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.83	B J	—	0.551
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.551
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.551
2,2',3,3',4',5,6-HpCB	177	—	1.11	J	—	0.551
2,2',3,3',5,5',6-HpCB	178	—	0.571	J	—	0.551
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.551
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.24	C B J	—	0.551
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.551
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.551
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.61	C K B J	U	0.551
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.551
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.551
2,2',3,4',5,5',6-HpCB	187	—	2.11	B J	U	0.551
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.551

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-4		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.551
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.551
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.551
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.551
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.551
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.551
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.551
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.551
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	0.960	C B J	—	0.551
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.551
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.551
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.551
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.551
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.551
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.04
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.871
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.842
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.36	B J	U	0.551
Total PCBs	—	—	59.4	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54147-1		Collection Date: 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.32	B J	U	0.539
3-MoCB	2	—	0.910	B J	U	0.539
4-MoCB	3	—	2.10	B J	U	0.539
2,2'-DiCB	4	—	—	U	—	2.78
2,3-DiCB	5	—	—	U	—	2.7
2,3'-DiCB	6	—	—	U	—	2.44
2,4-DiCB	7	—	—	U	—	2.47
2,4'-DiCB	8	—	2.68	B J	U	2.24
2,5-DiCB	9	—	—	U	—	2.39
2,6-DiCB	10	—	—	U	—	2.35
3,3'-DiCB	11	—	9.87	B J	U	2.61
3,4-DiCB	12	12 + 13	—	C U	—	2.65
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.57
4,4'-DiCB	15	—	—	U	—	2.56
2,2',3-TriCB	16	—	1.12	K B J	U	0.568
2,2',4-TriCB	17	—	1.27	K B J	U	0.539
2,2',5-TriCB	18	18 + 30	2.20	C K B J	U	0.539
2,2',6-TriCB	19	—	0.576	K J	U	0.539
2,3,3'-TriCB	20	20 + 28	3.49	C B J	U	0.539
2,3,4-TriCB	21	21 + 33	1.48	C B J	U	0.539
2,3,4'-TriCB	22	—	1.26	B J	U	0.539
2,3,5-TriCB	23	—	—	U	—	0.539
2,3,6-TriCB	24	—	—	U	—	0.539
2,3',4-TriCB	25	—	—	U	—	0.539
2,3',5-TriCB	26	26 + 29	0.646	C K J	U	0.539
2,3',6-TriCB	27	—	—	U	—	0.539
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.83	B J	U	0.539
2,4',6-TriCB	32	—	0.810	K B J	U	0.539
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.539
3,3',4-TriCB	35	—	—	U	—	0.539
3,3',5-TriCB	36	—	—	U	—	0.539
3,4,4'-TriCB	37	—	0.599	B J	U	0.539
3,4,5-TriCB	38	—	—	U	—	0.539
3,4',5-TriCB	39	—	—	U	—	0.539
2,2',3,3'-TeCB	40	40 + 41 + 71	1.59	C K B J	U	0.539
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.729	K B J	U	0.539
2,2',3,5-TeCB	43	—	—	U	—	0.539
2,2',3,5'-TeCB	44	44 + 47 + 65	13.8	C B J	R1	0.539
2,2',3,6-TeCB	45	45 + 51	5.40	C B J	R1	0.539
2,2',3,6'-TeCB	46	—	—	U	—	0.539
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-1		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.620	K B J	U	0.539
2,2',4,5'-TeCB	49	49 + 69	2.48	C B J	U	0.539
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.539
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	5.84	B J	—	0.539
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.539
2,3,3',4-TeCB	55	—	—	U	—	0.635
2,3,3',4'-TeCB	56	—	0.902	K B J	U	0.631
2,3,3',5-TeCB	57	—	—	U	—	0.592
2,3,3',5'-TeCB	58	—	—	U	—	0.592
2,3,3',6-TeCB	59	59 + 62 + 75	0.722	C K J	U	0.539
2,3,4,4'-TeCB	60	—	0.790	K B J	U	0.634
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	5.32	C B J	U	0.59
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.576
2,3,4',6-TeCB	64	—	1.31	K B J	U	0.539
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.07	K B J	U	0.582
2,3',4,5-TeCB	67	—	—	U	—	0.539
2,3',4,5'-TeCB	68	—	9.73	J	R1	0.574
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.57
2,3',5',6-TeCB	73	—	—	U	—	0.539
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.548
3,3',4,5-TeCB	78	—	—	U	—	0.641
3,3',4,5'-TeCB	79	—	—	U	—	0.539
3,3',5,5'-TeCB	80	—	—	U	—	0.551
3,4,4',5-TeCB	81	—	—	U	—	0.541
2,2',3,3',4-PeCB	82	—	1.20	K B J	U	0.622
2,2',3,3',5-PeCB	83	83 + 99	3.54	C B J	—	0.583
2,2',3,3',6-PeCB	84	—	1.71	B J	U	0.622
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.56	C B J	—	0.539
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	5.10	C B J	—	0.539
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.03	C B J	—	0.551
2,2',3,4,6'-PeCB	89	—	—	U	—	0.589
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.39	C B J	U	0.539
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	—	U	—	0.566
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.59	C B J	U	0.539
2,2',3,5,6'-PeCB	94	—	—	U	—	0.599

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-1		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.539
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.539
2,2',4,6,6'-PeCB	104	—	—	U	—	0.539
2,3,3',4,4'-PeCB	105	—	2.15	K B J	U	0.539
2,3,3',4,5-PeCB	106	—	—	U	—	0.539
2,3,3',4',5-PeCB	107	107 + 124	0.601	C K J	U	0.539
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.539
2,3,3',4',6-PeCB	110	110 + 115	9.69	C B J	U	0.539
2,3,3',5,5'-PeCB	111	—	—	U	—	0.539
2,3,3',5,6-PeCB	112	—	—	U	—	0.539
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.539
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.66	B J	U	0.539
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.539
2,3',4,5',6-PeCB	121	—	—	U	—	0.539
2',3,3',4,5-PeCB	122	—	—	U	—	0.539
2',3,4,4',5-PeCB	123	—	—	U	—	0.539
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.539
3,3',4,5,5'-PeCB	127	—	—	U	—	0.539
2,2',3,3',4,4'-HxCB	128	128 + 166	1.26	C K J	U	0.539
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.89	C B J	—	0.539
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.539
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.539
2,2',3,3',4,6'-HxCB	132	—	3.07	J	—	0.539
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.539
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.539
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.15	C J	—	0.539
2,2',3,3',6,6'-HxCB	136	—	0.745	J	—	0.539
2,2',3,4,4',5-HxCB	137	—	0.686	K J	U	0.539
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.539
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.600	K J	U	0.539

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-1		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.539
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.539
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.539
2,2',3,4',5,5'-HxCB	146	—	0.933	K J	U	0.539
2,2',3,4',5,6-HxCB	147	147 + 149	3.89	C B J	U	0.539
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.539
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.539
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.539
2,2',4,4',5,5'-HxCB	153	153 + 168	3.35	C B J	—	0.539
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.539
2,3,3',4,4',5-HxCB	156	156 + 157	0.820	C B J	—	0.539
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.539
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.539
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.539
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.539
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.731	J	—	0.539
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.539
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.844	J	—	0.539
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.539
2,2',3,3',4,4',5-HpCB	170	—	1.14	K B J	U	0.539
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.539
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.539
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	0.539
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.539
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.539
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.539
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.539
2,2',3,3',5,6,6'-HpCB	179	—	0.544	J	—	0.539
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.91	C B J	—	0.539
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.539
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.539
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.593	C K B J	U	0.539
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.539
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.539
2,2',3,4',5,5',6-HpCB	187	—	1.19	B J	U	0.539
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.539

Table B2-1. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-1		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.539
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.539
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.539
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.539
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.707	B J	—	0.539
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.539
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.539
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.539
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.00	C K B J	U	0.539
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.539
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.539
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.539
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.539
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.539
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	0.829
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.731
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.7
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.85	K B J	U	0.539
Total PCBs	—	—	37.8	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-4		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.45	B J	U	0.552
3-MoCB	2	—	2.52	B J	U	0.552
4-MoCB	3	—	8.54	B J	U	0.552
2,2'-DiCB	4	—	—	U	—	4.48
2,3-DiCB	5	—	—	U	—	3.66
2,3'-DiCB	6	—	—	U	—	3.32
2,4-DiCB	7	—	—	U	—	3.46
2,4'-DiCB	8	—	—	U	—	3.18
2,5-DiCB	9	—	—	U	—	3.24
2,6-DiCB	10	—	—	U	—	3.36
3,3'-DiCB	11	—	8.05	B J	—	3.58
3,4-DiCB	12	12 + 13	—	C U	—	3.63
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	3.41
4,4'-DiCB	15	—	5.00	B J	U	3.9
2,2',3-TriCB	16	—	—	U	—	0.86
2,2',4-TriCB	17	—	9.38	J	—	0.695
2,2',5-TriCB	18	18 + 30	1.66	C B J	—	0.583
2,2',6-TriCB	19	—	—	U	—	0.593
2,3,3'-TriCB	20	20 + 28	5.82	C B J	U	0.552
2,3,4-TriCB	21	21 + 33	7.41	C B J	—	0.552
2,3,4'-TriCB	22	—	0.735	K B J	U	0.552
2,3,5-TriCB	23	—	—	U	—	0.552
2,3,6-TriCB	24	—	—	U	—	0.552
2,3',4-TriCB	25	—	3.75	J	—	0.552
2,3',5-TriCB	26	26 + 29	—	C U	—	0.552
2,3',6-TriCB	27	—	—	U	—	0.552
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.50	B J	U	0.552
2,4',6-TriCB	32	—	—	U	—	0.552
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.552
3,3',4-TriCB	35	—	0.673	K J	U	0.552
3,3',5-TriCB	36	—	—	U	—	0.552
3,4,4'-TriCB	37	—	—	U	—	0.552
3,4,5-TriCB	38	—	—	U	—	0.552
3,4',5-TriCB	39	—	—	U	—	0.552
2,2',3,3'-TeCB	40	40 + 41 + 71	1.05	C K J	U	0.858
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.16	J	—	0.896
2,2',3,5-TeCB	43	—	—	U	—	1.04
2,2',3,5'-TeCB	44	44 + 47 + 65	831	C B	R1	0.787
2,2',3,6-TeCB	45	45 + 51	183	C	R1	0.85
2,2',3,6'-TeCB	46	—	—	U	—	0.981
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-4		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.862
2,2',4,5'-TeCB	49	49 + 69	15.5	C B J	—	0.735
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.827
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	2.02	K B J	U	0.785
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.552
2,3,3',4-TeCB	55	—	—	U	—	1.07
2,3,3',4'-TeCB	56	—	—	U	—	1.03
2,3,3',5-TeCB	57	—	—	U	—	1.01
2,3,3',5'-TeCB	58	—	—	U	—	1.01
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.653
2,3,4,4'-TeCB	60	—	—	U	—	1.05
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	2.46	C B J	—	0.996
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.947
2,3,4',6-TeCB	64	—	—	U	—	0.628
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.32	B J	U	0.93
2,3',4,5-TeCB	67	—	—	U	—	0.889
2,3',4,5'-TeCB	68	—	383	—	R1	0.98
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.959
2,3',5',6-TeCB	73	—	—	U	—	0.636
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.973
3,3',4,5-TeCB	78	—	—	U	—	0.994
3,3',4,5'-TeCB	79	—	—	U	—	0.842
3,3',5,5'-TeCB	80	—	—	U	—	0.91
3,4,4',5-TeCB	81	—	—	U	—	0.93
2,2',3,3',4-PeCB	82	—	—	U	—	0.552
2,2',3,3',5-PeCB	83	83 + 99	3.30	C B J	—	0.552
2,2',3,3',6-PeCB	84	—	0.815	K J	U	0.552
2,2',3,4,4'-PeCB	85	85 + 116 + 117	0.878	C K J	U	0.552
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	2.30	C K B J	U	0.552
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.28	C J	—	0.552
2,2',3,4,6'-PeCB	89	—	—	U	—	0.552
2,2',3,4',5-PeCB	90	90 + 101 + 113	3.26	C K B J	U	0.552
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	—	U	—	0.552
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	2.89	C K B J	U	0.552
2,2',3,5,6'-PeCB	94	—	—	U	—	0.552

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-4		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.552
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.552
2,2',4,6,6'-PeCB	104	—	—	U	—	0.552
2,3,3',4,4'-PeCB	105	—	1.26	B J	—	0.552
2,3,3',4,5-PeCB	106	—	—	U	—	0.552
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.552
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.552
2,3,3',4',6-PeCB	110	110 + 115	3.15	C B J	—	0.552
2,3,3',5,5'-PeCB	111	—	—	U	—	0.552
2,3,3',5,6-PeCB	112	—	—	U	—	0.552
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.552
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	2.28	B J	U	0.552
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.552
2,3',4,5',6-PeCB	121	—	—	U	—	0.552
2',3,3',4,5-PeCB	122	—	—	U	—	0.552
2',3,4,4',5-PeCB	123	—	—	U	—	0.552
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.552
3,3',4,5,5'-PeCB	127	—	—	U	—	0.552
2,2',3,3',4,4'-HxCB	128	128 + 166	0.561	C K J	U	0.552
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	2.69	C B J	U	0.552
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.552
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.552
2,2',3,3',4,6'-HxCB	132	—	0.851	J	—	0.552
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.552
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.552
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	0.775	C B J	—	0.552
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.552
2,2',3,4,4',5-HxCB	137	—	0.624	K J	U	0.552
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.765	C K J	U	0.552
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	0.552

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		KC Sample ID: L54686-4		Collection Date: 1/31/2012		
Compound	IUPAC #	Coelutions	Conc. (pg/L)	Lab Qual	Val Qual	SDL (pg/L)
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.552
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.552
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.552
2,2',3,4',5,5'-HxCB	146	—	—	U	—	0.552
2,2',3,4',5,6-HxCB	147	147 + 149	2.60	C K B J	U	0.552
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.552
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.552
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.552
2,2',4,4',5,5'-HxCB	153	153 + 168	1.74	C K B J	U	0.552
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.552
2,3,3',4,4',5-HxCB	156	156 + 157	—	C U	—	0.552
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.552
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.552
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.552
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.552
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.552
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.552
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.552
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.552
2,2',3,3',4,4',5-HpCB	170	—	—	U	—	0.552
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.552
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.552
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	0.552
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.552
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.552
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.552
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.552
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.552
2,2',3,4,4',5,5'-HpCB	180	180 + 193	0.983	C J	—	0.552
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.552
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.552
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.552
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.552
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.552
2,2',3,4',5,5',6-HpCB	187	—	0.624	K B J	U	0.552
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.552

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-4		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.552
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.552
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.552
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.552
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.552
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.552
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.552
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.552
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	0.552
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.552
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.552
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.552
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.552
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.552
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.9
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.23
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.41
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.78	K B J	U	0.552
Total PCBs	—	—	62.0	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		KC Sample ID: L55077-4		Collection Date: 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.20	B J	U	0.518
3-MoCB	2	—	2.52	B J	U	0.518
4-MoCB	3	—	8.18	B J	U	0.518
2,2'-DiCB	4	—	—	U	—	3.74
2,3-DiCB	5	—	—	U	—	3.01
2,3'-DiCB	6	—	—	U	—	2.74
2,4-DiCB	7	—	—	U	—	2.85
2,4'-DiCB	8	—	—	U	—	2.58
2,5-DiCB	9	—	—	U	—	2.72
2,6-DiCB	10	—	—	U	—	2.8
3,3'-DiCB	11	—	6.98	B J	—	2.94
3,4-DiCB	12	12 + 13	—	C U	—	2.97
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.85
4,4'-DiCB	15	—	5.70	B J	U	3.05
2,2',3-TriCB	16	—	0.655	K J	U	0.518
2,2',4-TriCB	17	—	2.61	K J	U	0.518
2,2',5-TriCB	18	18 + 30	1.22	C K B J	U	0.518
2,2',6-TriCB	19	—	—	U	—	0.518
2,3,3'-TriCB	20	20 + 28	2.55	C B J	U	0.518
2,3,4-TriCB	21	21 + 33	2.83	C B J	U	0.518
2,3,4'-TriCB	22	—	0.706	B J	—	0.518
2,3,5-TriCB	23	—	—	U	—	0.518
2,3,6-TriCB	24	—	—	U	—	0.518
2,3',4-TriCB	25	—	—	U	—	0.518
2,3',5-TriCB	26	26 + 29	—	C U	—	0.518
2,3',6-TriCB	27	—	—	U	—	0.518
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.51	B J	U	0.518
2,4',6-TriCB	32	—	0.641	K J	U	0.518
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.518
3,3',4-TriCB	35	—	—	U	—	0.518
3,3',5-TriCB	36	—	—	U	—	0.518
3,4,4'-TriCB	37	—	0.533	J	—	0.518
3,4,5-TriCB	38	—	—	U	—	0.518
3,4',5-TriCB	39	—	—	U	—	0.518
2,2',3,3'-TeCB	40	40 + 41 + 71	0.873	C J	—	0.699
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.723
2,2',3,5-TeCB	43	—	—	U	—	0.853
2,2',3,5'-TeCB	44	44 + 47 + 65	73.6	C B	R1	0.644
2,2',3,6-TeCB	45	45 + 51	51.3	C	R1	0.687
2,2',3,6'-TeCB	46	—	—	U	—	0.786
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-4		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.689
2,2',4,5'-TeCB	49	49 + 69	2.74	C B J	—	0.594
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.67
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	2.62	B J	U	0.644
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.518
2,3,3',4-TeCB	55	—	—	U	—	0.969
2,3,3',4'-TeCB	56	—	—	U	—	0.969
2,3,3',5-TeCB	57	—	—	U	—	0.912
2,3,3',5'-TeCB	58	—	—	U	—	0.928
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.541
2,3,4,4'-TeCB	60	—	—	U	—	0.971
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	2.75	C B J	—	0.92
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.878
2,3,4',6-TeCB	64	—	0.890	B J	U	0.52
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	1.38	B J	U	0.881
2,3',4,5-TeCB	67	—	—	U	—	0.822
2,3',4,5'-TeCB	68	—	64.9	—	R1	0.877
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.888
2,3',5',6-TeCB	73	—	—	U	—	0.521
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.938
3,3',4,5-TeCB	78	—	—	U	—	0.926
3,3',4,5'-TeCB	79	—	—	U	—	0.809
3,3',5,5'-TeCB	80	—	—	U	—	0.864
3,4,4',5-TeCB	81	—	—	U	—	0.909
2,2',3,3',4-PeCB	82	—	—	U	—	0.518
2,2',3,3',5-PeCB	83	83 + 99	2.34	C B J	—	0.518
2,2',3,3',6-PeCB	84	—	0.654	J	—	0.518
2,2',3,4,4'-PeCB	85	85 + 116 + 117	0.817	C K J	U	0.518
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	2.63	C K B J	U	0.518
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	0.984	C K J	U	0.518
2,2',3,4,6'-PeCB	89	—	—	U	—	0.518
2,2',3,4',5-PeCB	90	90 + 101 + 113	3.28	C B J	U	0.518
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	—	U	—	0.518
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	2.97	C B J	U	0.518
2,2',3,5,6'-PeCB	94	—	—	U	—	0.518

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-4		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.518
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.518
2,2',4,6,6'-PeCB	104	—	—	U	—	0.518
2,3,3',4,4'-PeCB	105	—	0.889	K B J	U	0.518
2,3,3',4,5-PeCB	106	—	—	U	—	0.518
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.518
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.518
2,3,3',4',6-PeCB	110	110 + 115	3.42	C K B J	U	0.518
2,3,3',5,5'-PeCB	111	—	—	U	—	0.518
2,3,3',5,6-PeCB	112	—	—	U	—	0.518
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.518
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	2.08	B J	U	0.518
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.518
2,3',4,5',6-PeCB	121	—	—	U	—	0.518
2',3,3',4,5-PeCB	122	—	—	U	—	0.518
2',3,4,4',5-PeCB	123	—	—	U	—	0.518
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.518
3,3',4,5,5'-PeCB	127	—	—	U	—	0.518
2,2',3,3',4,4'-HxCB	128	128 + 166	0.590	C J	—	0.518
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	2.41	C B J	U	0.518
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.518
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.518
2,2',3,3',4,6'-HxCB	132	—	1.44	K J	U	0.518
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.518
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.518
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.05	C K B J	U	0.518
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.518
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.518
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.518
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	0.518

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-4		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.518
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.518
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.518
2,2',3,4',5,5'-HxCB	146	—	—	U	—	0.518
2,2',3,4',5,6-HxCB	147	147 + 149	2.62	C B J	—	0.518
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.518
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.518
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.518
2,2',4,4',5,5'-HxCB	153	153 + 168	2.43	C B J	—	0.518
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.518
2,3,3',4,4',5-HxCB	156	156 + 157	—	C U	—	0.518
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.518
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.518
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.518
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.518
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.518
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.518
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.518
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.518
2,2',3,3',4,4',5-HpCB	170	—	0.782	J	—	0.518
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.518
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.518
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.617	K J	U	0.518
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.518
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.518
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.518
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.518
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.518
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.28	C J	—	0.518
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.518
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.518
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.518
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.518
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.518
2,2',3,4',5,5',6-HpCB	187	—	0.817	K B J	U	0.518
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.518

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-4		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.518
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.518
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.518
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.518
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.518
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.518
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.518
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.518
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	0.518
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.518
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.518
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.518
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.518
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.518
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.49
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.58
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.54
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.22	K B J	U	0.518
Total PCBs	—	—	25.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-4		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.59	B J	U	0.533
3-MoCB	2	—	2.64	B J	U	0.533
4-MoCB	3	—	9.33	B J	U	0.533
2,2'-DiCB	4	—	—	U	—	3
2,3-DiCB	5	—	—	U	—	2.51
2,3'-DiCB	6	—	—	U	—	2.3
2,4-DiCB	7	—	2.99	B J	U	2.33
2,4'-DiCB	8	—	3.48	K J	U	2.14
2,5-DiCB	9	—	—	U	—	2.23
2,6-DiCB	10	—	—	U	—	2.27
3,3'-DiCB	11	—	8.10	B J	—	2.35
3,4-DiCB	12	12 + 13	—	C U	—	2.37
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.26
4,4'-DiCB	15	—	6.46	B J	U	2.69
2,2',3-TriCB	16	—	1.41	J	—	0.533
2,2',4-TriCB	17	—	3.92	J	—	0.533
2,2',5-TriCB	18	18 + 30	2.51	C B J	—	0.533
2,2',6-TriCB	19	—	0.594	K J	U	0.533
2,3,3'-TriCB	20	20 + 28	8.19	C B J	U	0.533
2,3,4-TriCB	21	21 + 33	11.4	C B J	—	0.533
2,3,4'-TriCB	22	—	2.45	B J	—	0.533
2,3,5-TriCB	23	—	—	U	—	0.533
2,3,6-TriCB	24	—	—	U	—	0.533
2,3',4-TriCB	25	—	1.60	J	—	0.533
2,3',5-TriCB	26	26 + 29	0.840	C J	—	0.533
2,3',6-TriCB	27	—	—	U	—	0.533
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	5.06	B J	U	0.533
2,4',6-TriCB	32	—	1.42	J	—	0.533
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.533
3,3',4-TriCB	35	—	—	U	—	0.533
3,3',5-TriCB	36	—	—	U	—	0.533
3,4,4'-TriCB	37	—	1.67	J	—	0.533
3,4,5-TriCB	38	—	—	U	—	0.533
3,4',5-TriCB	39	—	—	U	—	0.533
2,2',3,3'-TeCB	40	40 + 41 + 71	1.61	C J	—	0.717
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.950	K J	U	0.747
2,2',3,5-TeCB	43	—	—	U	—	0.818
2,2',3,5'-TeCB	44	44 + 47 + 65	371	C B	R1	0.647
2,2',3,6-TeCB	45	45 + 51	196	C	R1	0.685
2,2',3,6'-TeCB	46	—	—	U	—	0.79
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-4		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.00	K J	U	0.696
2,2',4,5'-TeCB	49	49 + 69	9.81	C B J	—	0.599
2,2',4,6-TeCB	50	50 + 53	0.870	C K J	U	0.648
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.19	B J	U	0.662
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.533
2,3,3',4-TeCB	55	—	—	U	—	1.48
2,3,3',4'-TeCB	56	—	1.81	J	—	1.46
2,3,3',5-TeCB	57	—	—	U	—	1.39
2,3,3',5'-TeCB	58	—	—	U	—	1.44
2,3,3',6-TeCB	59	59 + 62 + 75	1.21	C J	—	0.539
2,3,4,4'-TeCB	60	—	—	U	—	1.46
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	10.7	C B J	—	1.4
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.31
2,3,4',6-TeCB	64	—	1.51	B J	U	0.533
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.37	B J	—	1.3
2,3',4,5-TeCB	67	—	—	U	—	1.31
2,3',4,5'-TeCB	68	—	285	—	R1	1.37
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.33
2,3',5',6-TeCB	73	—	—	U	—	0.537
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.36
3,3',4,5-TeCB	78	—	—	U	—	1.4
3,3',4,5'-TeCB	79	—	—	U	—	1.19
3,3',5,5'-TeCB	80	—	—	U	—	1.28
3,4,4',5-TeCB	81	—	—	U	—	1.34
2,2',3,3',4-PeCB	82	—	—	U	—	0.533
2,2',3,3',5-PeCB	83	83 + 99	6.15	C B J	—	0.533
2,2',3,3',6-PeCB	84	—	2.12	K J	U	0.533
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.48	C K J	U	0.533
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	7.81	C B J	—	0.533
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.68	C J	—	0.533
2,2',3,4,6'-PeCB	89	—	—	U	—	0.533
2,2',3,4',5-PeCB	90	90 + 101 + 113	10.6	C B J	—	0.533
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.28	K J	U	0.533
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	8.09	C B J	—	0.533
2,2',3,5,6'-PeCB	94	—	—	U	—	0.533

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-4		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.533
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.533
2,2',4,6,6'-PeCB	104	—	—	U	—	0.533
2,3,3',4,4'-PeCB	105	—	5.21	B J	—	0.533
2,3,3',4,5-PeCB	106	—	—	U	—	0.533
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.533
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.736	K J	U	0.533
2,3,3',4',6-PeCB	110	110 + 115	12.3	C B J	—	0.533
2,3,3',5,5'-PeCB	111	—	—	U	—	0.533
2,3,3',5,6-PeCB	112	—	—	U	—	0.533
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.533
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	12.0	B J	—	0.533
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.533
2,3',4,5',6-PeCB	121	—	—	U	—	0.533
2',3,3',4,5-PeCB	122	—	—	U	—	0.533
2',3,4,4',5-PeCB	123	—	—	U	—	0.533
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.533
3,3',4,5,5'-PeCB	127	—	—	U	—	0.533
2,2',3,3',4,4'-HxCB	128	128 + 166	2.51	C J	—	0.533
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	11.0	C B J	—	0.533
2,2',3,3',4,5'-HxCB	130	—	0.963	K J	U	0.533
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.533
2,2',3,3',4,6'-HxCB	132	—	4.51	J	—	0.533
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.533
2,2',3,3',5,6-HxCB	134	134 + 143	1.01	C K J	U	0.533
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.67	C K B J	U	0.533
2,2',3,3',6,6'-HxCB	136	—	1.25	J	—	0.533
2,2',3,4,4',5-HxCB	137	—	1.25	J	—	0.533
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.867	C K J	U	0.533
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.75	J	—	0.533

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-4		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.533
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.533
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.533
2,2',3,4',5,5'-HxCB	146	—	1.10	K J	U	0.533
2,2',3,4',5,6-HxCB	147	147 + 149	7.94	C B J	—	0.533
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.533
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.533
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.533
2,2',4,4',5,5'-HxCB	153	153 + 168	7.07	C B J	—	0.533
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.533
2,3,3',4,4',5-HxCB	156	156 + 157	1.67	C K J	U	0.533
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.23	K J	U	0.533
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.533
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.533
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.533
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.693	K J	U	0.533
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.533
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.533
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.533
2,2',3,3',4,4',5-HpCB	170	—	1.21	J	—	0.533
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.533
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.533
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.08	K J	U	0.533
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.533
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.533
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.533
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.533
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.533
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.84	C J	—	0.533
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.533
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.533
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.533
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.533
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.533
2,2',3,4',5,5',6-HpCB	187	—	0.891	B J	U	0.533
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.533

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-4		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.533
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.533
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.533
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.533
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.666	K J	U	0.533
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.533
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.533
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.533
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	0.533
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.533
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.533
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.533
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.533
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.533
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.8
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.55
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.63
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.70	K B J	U	0.533
Total PCBs	—	—	171	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-4		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.67	B J	U	0.514
3-MoCB	2	—	1.39	B J	U	0.514
4-MoCB	3	—	2.88	B J	U	0.514
2,2'-DiCB	4	—	—	U	—	1.02
2,3-DiCB	5	—	—	U	—	0.889
2,3'-DiCB	6	—	—	U	—	0.772
2,4-DiCB	7	—	2.38	J	—	0.777
2,4'-DiCB	8	—	1.76	B J	U	0.694
2,5-DiCB	9	—	—	U	—	0.775
2,6-DiCB	10	—	—	U	—	0.751
3,3'-DiCB	11	—	11.8	B J	U	0.894
3,4-DiCB	12	12 + 13	—	C U	—	0.91
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.813
4,4'-DiCB	15	—	1.69	B J	U	0.977
2,2',3-TriCB	16	—	—	U	—	0.514
2,2',4-TriCB	17	—	1.77	J	—	0.514
2,2',5-TriCB	18	18 + 30	1.79	C B J	—	0.514
2,2',6-TriCB	19	—	—	U	—	0.514
2,3,3'-TriCB	20	20 + 28	4.15	C B J	U	0.514
2,3,4-TriCB	21	21 + 33	2.60	C B J	—	0.514
2,3,4'-TriCB	22	—	1.06	K B J	U	0.514
2,3,5-TriCB	23	—	—	U	—	0.514
2,3,6-TriCB	24	—	—	U	—	0.514
2,3',4-TriCB	25	—	0.550	J	—	0.514
2,3',5-TriCB	26	26 + 29	0.661	C J	—	0.514
2,3',6-TriCB	27	—	—	U	—	0.514
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.43	B J	U	0.514
2,4',6-TriCB	32	—	—	U	—	0.514
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.514
3,3',4-TriCB	35	—	—	U	—	0.514
3,3',5-TriCB	36	—	—	U	—	0.514
3,4,4'-TriCB	37	—	1.12	B J	—	0.514
3,4,5-TriCB	38	—	—	U	—	0.514
3,4',5-TriCB	39	—	—	U	—	0.514
2,2',3,3'-TeCB	40	40 + 41 + 71	1.78	C B J	U	0.514
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.872	J	—	0.514
2,2',3,5-TeCB	43	—	—	U	—	0.514
2,2',3,5'-TeCB	44	44 + 47 + 65	67.7	C B	R1	0.514
2,2',3,6-TeCB	45	45 + 51	27.2	C	R1	0.514
2,2',3,6'-TeCB	46	—	—	U	—	0.514
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-4		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.514
2,2',4,5'-TeCB	49	49 + 69	3.37	C B J	—	0.514
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.514
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.20	B J	—	0.514
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.514
2,3,3',4-TeCB	55	—	—	U	—	0.589
2,3,3',4'-TeCB	56	—	2.13	K B J	U	0.584
2,3,3',5-TeCB	57	—	—	U	—	0.543
2,3,3',5'-TeCB	58	—	—	U	—	0.557
2,3,3',6-TeCB	59	59 + 62 + 75	0.582	C J	—	0.514
2,3,4,4'-TeCB	60	—	1.93	J	—	0.593
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	19.5	C B J	U	0.55
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	0.564	J	—	0.529
2,3,4',6-TeCB	64	—	3.41	B J	U	0.514
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	11.8	B J	—	0.547
2,3',4,5-TeCB	67	—	—	U	—	0.514
2,3',4,5'-TeCB	68	—	64.5	—	R1	0.547
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.521
2,3',5',6-TeCB	73	—	—	U	—	0.514
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.35	K B J	U	0.537
3,3',4,5-TeCB	78	—	—	U	—	0.589
3,3',4,5'-TeCB	79	—	—	U	—	0.514
3,3',5,5'-TeCB	80	—	—	U	—	0.519
3,4,4',5-TeCB	81	—	—	U	—	0.536
2,2',3,3',4-PeCB	82	—	1.30	K J	U	0.737
2,2',3,3',5-PeCB	83	83 + 99	20.4	C B J	—	0.677
2,2',3,3',6-PeCB	84	—	4.40	B J	U	0.793
2,2',3,4,4'-PeCB	85	85 + 116 + 117	6.80	C B J	U	0.547
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	13.2	C B J	U	0.572
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.23	C B J	U	0.676
2,2',3,4,6'-PeCB	89	—	—	U	—	0.716
2,2',3,4',5-PeCB	90	90 + 101 + 113	25.3	C B	U	0.587
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	5.32	B J	U	0.7
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	12.8	C B J	U	0.654
2,2',3,5,6'-PeCB	94	—	—	U	—	0.726

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-4		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.514
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.586
2,2',4,6,6'-PeCB	104	—	—	U	—	0.514
2,3,3',4,4'-PeCB	105	—	8.24	B J	U	0.514
2,3,3',4,5-PeCB	106	—	—	U	—	0.52
2,3,3',4',5-PeCB	107	107 + 124	1.04	C J	—	0.57
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.97	B J	—	0.561
2,3,3',4',6-PeCB	110	110 + 115	22.5	C B	U	0.514
2,3,3',5,5'-PeCB	111	—	—	U	—	0.514
2,3,3',5,6-PeCB	112	—	—	U	—	0.514
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.732	K J	U	0.52
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	23.0	B	U	0.514
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.514
2,3',4,5',6-PeCB	121	—	—	U	—	0.514
2',3,3',4,5-PeCB	122	—	—	U	—	0.582
2',3,4,4',5-PeCB	123	—	0.737	K J	U	0.524
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.595
3,3',4,5,5'-PeCB	127	—	—	U	—	0.514
2,2',3,3',4,4'-HxCB	128	128 + 166	2.86	C B J	U	0.62
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	18.9	C B J	U	0.596
2,2',3,3',4,5'-HxCB	130	—	1.13	K J	U	0.735
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.883
2,2',3,3',4,6'-HxCB	132	—	3.55	B J	U	0.884
2,2',3,3',5,5'-HxCB	133	—	1.22	J	—	0.772
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.875
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	6.39	C B J	U	0.6
2,2',3,3',6,6'-HxCB	136	—	1.66	K B J	U	0.514
2,2',3,4,4',5-HxCB	137	—	1.42	J	—	0.692
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.781
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.47	K J	U	0.666

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-4		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.849
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.675	K J	U	0.609
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.514
2,2',3,4',5,5'-HxCB	146	—	5.52	J	—	0.663
2,2',3,4',5,6-HxCB	147	147 + 149	12.4	C B J	—	0.793
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.65
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.514
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.514
2,2',4,4',5,5'-HxCB	153	153 + 168	25.4	C B	—	0.529
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.514
2,3,3',4,4',5-HxCB	156	156 + 157	1.23	C K J	U	0.756
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.04	J	—	0.514
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.541
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.514
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.576
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.694	J	—	0.514
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.615
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.538
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.545
2,2',3,3',4,4',5-HpCB	170	—	1.11	B J	—	0.619
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.683	C K J	U	0.595
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.607
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.31	K B J	U	0.534
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.514
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.514
2,2',3,3',4',5,6-HpCB	177	—	1.60	K J	U	0.574
2,2',3,3',5,5',6-HpCB	178	—	1.37	J	—	0.514
2,2',3,3',5,6,6'-HpCB	179	—	0.807	K J	U	0.514
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.02	C B J	—	0.514
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.562
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.514
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.34	C J	—	0.514
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.514
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.514
2,2',3,4',5,5',6-HpCB	187	—	6.17	B J	—	0.514
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.514

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-4		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.514
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.514
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.514
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.514
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.52
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.55
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.593
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.514
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	0.858	C K B J	U	0.611
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.514
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.514
2,2',3,4,4',5,5',6-OcCB	203	—	1.13	K J	U	0.574
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.514
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.514
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.02
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.771
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.801
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.45	K B J	U	0.514
Total PCBs	—	—	124	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069 **KC Sample ID:** L55284-4 **Collection Date:** 3/20/2012

Compound	IUPAC #	Coelutions	Conc. (pg/L)	Lab Qual	Val Qual	SDL (pg/L)
2-MoCB	1	—	1.45	B J	U	0.513
3-MoCB	2	—	1.42	B J	U	0.513
4-MoCB	3	—	2.66	B J	U	0.513
2,2'-DiCB	4	—	—	U	—	1.14
2,3-DiCB	5	—	—	U	—	1.07
2,3'-DiCB	6	—	—	U	—	0.923
2,4-DiCB	7	—	—	U	—	0.912
2,4'-DiCB	8	—	1.82	K B J	U	0.831
2,5-DiCB	9	—	—	U	—	0.915
2,6-DiCB	10	—	—	U	—	0.893
3,3'-DiCB	11	—	11.3	B J	U	0.995
3,4-DiCB	12	12 + 13	—	C U	—	1.01
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.97
4,4'-DiCB	15	—	1.29	B J	U	1.16
2,2',3-TriCB	16	—	0.708	B J	—	0.513
2,2',4-TriCB	17	—	1.80	J	—	0.513
2,2',5-TriCB	18	18 + 30	1.35	C K B J	U	0.513
2,2',6-TriCB	19	—	—	U	—	0.513
2,3,3'-TriCB	20	20 + 28	2.98	C B J	U	0.513
2,3,4-TriCB	21	21 + 33	2.44	C B J	—	0.513
2,3,4'-TriCB	22	—	0.873	K B J	U	0.513
2,3,5-TriCB	23	—	—	U	—	0.513
2,3,6-TriCB	24	—	—	U	—	0.513
2,3',4-TriCB	25	—	0.514	J	—	0.513
2,3',5-TriCB	26	26 + 29	—	C U	—	0.513
2,3',6-TriCB	27	—	—	U	—	0.513
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.62	B J	U	0.513
2,4',6-TriCB	32	—	—	U	—	0.513
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.513
3,3',4-TriCB	35	—	—	U	—	0.513
3,3',5-TriCB	36	—	—	U	—	0.513
3,4,4'-TriCB	37	—	0.808	B J	—	0.513
3,4,5-TriCB	38	—	—	U	—	0.513
3,4',5-TriCB	39	—	—	U	—	0.513
2,2',3,3'-TeCB	40	40 + 41 + 71	1.89	C K B J	U	0.513
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.801	K J	U	0.513
2,2',3,5-TeCB	43	—	—	U	—	0.513
2,2',3,5'-TeCB	44	44 + 47 + 65	97.0	C B	R1	0.513
2,2',3,6-TeCB	45	45 + 51	32.8	C	R1	0.513
2,2',3,6'-TeCB	46	—	—	U	—	0.513
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-4		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.513
2,2',4,5'-TeCB	49	49 + 69	2.82	C B J	—	0.513
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.513
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	4.74	B J	—	0.513
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.513
2,3,3',4-TeCB	55	—	—	U	—	0.63
2,3,3',4'-TeCB	56	—	1.72	B J	U	0.64
2,3,3',5-TeCB	57	—	—	U	—	0.611
2,3,3',5'-TeCB	58	—	—	U	—	0.604
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.513
2,3,4,4'-TeCB	60	—	0.820	K J	U	0.632
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.61	C B J	U	0.594
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.588
2,3,4',6-TeCB	64	—	1.73	B J	U	0.513
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.80	K B J	U	0.588
2,3',4,5-TeCB	67	—	—	U	—	0.539
2,3',4,5'-TeCB	68	—	74.5	—	R1	0.612
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.605
2,3',5',6-TeCB	73	—	—	U	—	0.513
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.516	B J	—	0.513
3,3',4,5-TeCB	78	—	—	U	—	0.611
3,3',4,5'-TeCB	79	—	—	U	—	0.513
3,3',5,5'-TeCB	80	—	—	U	—	0.56
3,4,4',5-TeCB	81	—	—	U	—	0.559
2,2',3,3',4-PeCB	82	—	1.57	J	—	0.87
2,2',3,3',5-PeCB	83	83 + 99	8.59	C B J	U	0.775
2,2',3,3',6-PeCB	84	—	3.82	B J	U	0.914
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.30	C K B J	U	0.631
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	11.5	C B J	U	0.662
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.92	C B J	U	0.768
2,2',3,4,6'-PeCB	89	—	—	U	—	0.828
2,2',3,4',5-PeCB	90	90 + 101 + 113	13.1	C B J	U	0.679
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.20	B J	U	0.782
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	10.1	C B J	U	0.752
2,2',3,5,6'-PeCB	94	—	—	U	—	0.875

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-4		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.513
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.708
2,2',4,6,6'-PeCB	104	—	—	U	—	0.513
2,3,3',4,4'-PeCB	105	—	8.21	B J	U	0.513
2,3,3',4,5-PeCB	106	—	—	U	—	0.513
2,3,3',4',5-PeCB	107	107 + 124	0.694	C J	—	0.513
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.45	B J	—	0.513
2,3,3',4',6-PeCB	110	110 + 115	18.3	C B J	U	0.561
2,3,3',5,5'-PeCB	111	—	—	U	—	0.549
2,3,3',5,6-PeCB	112	—	—	U	—	0.568
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.513
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	17.5	B J	U	0.513
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.521
2,3',4,5',6-PeCB	121	—	—	U	—	0.575
2',3,3',4,5-PeCB	122	—	—	U	—	0.513
2',3,4,4',5-PeCB	123	—	0.680	J	—	0.513
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.513
3,3',4,5,5'-PeCB	127	—	—	U	—	0.513
2,2',3,3',4,4'-HxCB	128	128 + 166	4.67	C B J	—	0.82
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	22.8	C B	—	0.8
2,2',3,3',4,5'-HxCB	130	—	1.64	J	—	1
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.12
2,2',3,3',4,6'-HxCB	132	—	5.05	B J	U	1.16
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.04
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.17
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.76	C B J	U	0.655
2,2',3,3',6,6'-HxCB	136	—	1.42	B J	—	0.514
2,2',3,4,4',5-HxCB	137	—	1.14	J	—	0.93
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.01
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.31	J	—	0.88

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-4		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.1
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.636
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.55
2,2',3,4',5,5'-HxCB	146	—	3.74	J	—	0.856
2,2',3,4',5,6-HxCB	147	147 + 149	10.9	C K B J	U	1.06
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.685
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.52
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.513
2,2',4,4',5,5'-HxCB	153	153 + 168	19.0	C B J	—	0.699
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.513
2,3,3',4,4',5-HxCB	156	156 + 157	2.28	C K J	U	0.992
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.82	K J	U	0.635
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.709
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.699
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.74
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.08	J	—	0.673
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.792
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.15	J	—	0.676
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.717
2,2',3,3',4,4',5-HpCB	170	—	1.94	B J	—	0.633
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.01	C J	—	0.63
2,2',3,3',4,5,5'-HpCB	172	—	0.746	J	—	0.639
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.00	K B J	U	0.561
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.513
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.513
2,2',3,3',4',5,6-HpCB	177	—	1.99	J	—	0.596
2,2',3,3',5,5',6-HpCB	178	—	1.09	K J	U	0.531
2,2',3,3',5,6,6'-HpCB	179	—	1.08	K J	U	0.513
2,2',3,4,4',5,5'-HpCB	180	180 + 193	8.74	C B J	—	0.524
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.577
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.535
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.93	C J	—	0.533
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.513
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.513
2,2',3,4',5,5',6-HpCB	187	—	7.63	K B J	U	0.514
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.513

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-4		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.513
2,3,3',4,4',5,6-HpCB	190	—	0.628	K J	U	0.513
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.513
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.513
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.696	J	—	0.525
2,2',3,3',4,4',5,6-OcCB	195	—	0.571	K J	U	0.568
2,2',3,3',4,4',5,6'-OcCB	196	—	0.608	K J	U	0.513
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.513
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.79	C B J	—	0.513
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.513
2,2',3,3',5,5',6,6'-OcCB	202	—	0.780	J	—	0.513
2,2',3,4,4',5,5',6-OcCB	203	—	1.55	K J	U	0.513
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.513
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.513
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	0.763
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.577
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.597
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.35	K B J	U	0.513
Total PCBs	—	—	99.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-3		**Collection Date:**	3/29/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.92	K B J	U	0.524
3-MoCB	2	—	1.89	B J	U	0.524
4-MoCB	3	—	3.73	B J	U	0.524
2,2'-DiCB	4	—	0.982	J	—	0.895
2,3-DiCB	5	—	—	U	—	0.754
2,3'-DiCB	6	—	0.933	K J	U	0.665
2,4-DiCB	7	—	3.34	J	—	0.696
2,4'-DiCB	8	—	2.61	B J	U	0.619
2,5-DiCB	9	—	—	U	—	0.659
2,6-DiCB	10	—	—	U	—	0.659
3,3'-DiCB	11	—	14.1	B J	U	0.715
3,4-DiCB	12	12 + 13	—	C U	—	0.743
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.694
4,4'-DiCB	15	—	2.46	B J	U	0.817
2,2',3-TriCB	16	—	0.809	B J	—	0.55
2,2',4-TriCB	17	—	2.08	J	—	0.524
2,2',5-TriCB	18	18 + 30	2.25	C B J	—	0.524
2,2',6-TriCB	19	—	—	U	—	0.524
2,3,3'-TriCB	20	20 + 28	5.58	C B J	U	0.524
2,3,4-TriCB	21	21 + 33	3.93	C B J	—	0.524
2,3,4'-TriCB	22	—	1.81	B J	U	0.524
2,3,5-TriCB	23	—	—	U	—	0.524
2,3,6-TriCB	24	—	—	U	—	0.524
2,3',4-TriCB	25	—	0.816	J	—	0.524
2,3',5-TriCB	26	26 + 29	0.768	C K J	U	0.524
2,3',6-TriCB	27	—	—	U	—	0.524
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.76	B J	U	0.524
2,4',6-TriCB	32	—	0.797	J	—	0.524
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.524
3,3',4-TriCB	35	—	—	U	—	0.524
3,3',5-TriCB	36	—	—	U	—	0.524
3,4,4'-TriCB	37	—	1.85	B J	—	0.524
3,4,5-TriCB	38	—	—	U	—	0.524
3,4',5-TriCB	39	—	—	U	—	0.524
2,2',3,3'-TeCB	40	40 + 41 + 71	2.21	C B J	U	0.524
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.08	K J	U	0.524
2,2',3,5-TeCB	43	—	—	U	—	0.524
2,2',3,5'-TeCB	44	44 + 47 + 65	71.8	C B	R1	0.524
2,2',3,6-TeCB	45	45 + 51	35.7	C	R1	0.524
2,2',3,6'-TeCB	46	—	—	U	—	0.524
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-3		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.524
2,2',4,5'-TeCB	49	49 + 69	4.02	C B J	—	0.524
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.524
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.88	K B J	U	0.524
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.524
2,3,3',4-TeCB	55	—	—	U	—	0.533
2,3,3',4'-TeCB	56	—	1.59	B J	U	0.524
2,3,3',5-TeCB	57	—	—	U	—	0.524
2,3,3',5'-TeCB	58	—	—	U	—	0.524
2,3,3',6-TeCB	59	59 + 62 + 75	0.574	C K J	U	0.524
2,3,4,4'-TeCB	60	—	1.09	J	—	0.527
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.90	C B J	U	0.524
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.524
2,3,4',6-TeCB	64	—	1.98	K B J	U	0.524
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.59	B J	U	0.524
2,3',4,5-TeCB	67	—	—	U	—	0.524
2,3',4,5'-TeCB	68	—	50.5	—	R1	0.524
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.524
2,3',5',6-TeCB	73	—	—	U	—	0.524
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.921	K B J	U	0.524
3,3',4,5-TeCB	78	—	—	U	—	0.524
3,3',4,5'-TeCB	79	—	—	U	—	0.524
3,3',5,5'-TeCB	80	—	—	U	—	0.524
3,4,4',5-TeCB	81	—	—	U	—	0.524
2,2',3,3',4-PeCB	82	—	2.09	J	—	0.991
2,2',3,3',5-PeCB	83	83 + 99	8.83	C B J	U	0.943
2,2',3,3',6-PeCB	84	—	4.42	B J	U	1.07
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.18	C B J	U	0.743
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	11.8	C B J	U	0.787
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.11	C K B J	U	0.912
2,2',3,4,6'-PeCB	89	—	—	U	—	0.936
2,2',3,4',5-PeCB	90	90 + 101 + 113	14.7	C B J	U	0.798
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.36	B J	U	0.913
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	12.8	C B J	U	0.889
2,2',3,5,6'-PeCB	94	—	—	U	—	1.04

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-3		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.524
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.857
2,2',4,6,6'-PeCB	104	—	—	U	—	0.524
2,3,3',4,4'-PeCB	105	—	3.42	B J	U	0.524
2,3,3',4,5-PeCB	106	—	—	U	—	0.524
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.524
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.631	K B J	U	0.524
2,3,3',4',6-PeCB	110	110 + 115	16.8	C B J	U	0.652
2,3,3',5,5'-PeCB	111	—	—	U	—	0.636
2,3,3',5,6-PeCB	112	—	—	U	—	0.687
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.524
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	10.9	B J	U	0.524
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.597
2,3',4,5',6-PeCB	121	—	—	U	—	0.67
2',3,3',4,5-PeCB	122	—	—	U	—	0.524
2',3,4,4',5-PeCB	123	—	—	U	—	0.524
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.524
3,3',4,5,5'-PeCB	127	—	—	U	—	0.524
2,2',3,3',4,4'-HxCB	128	128 + 166	1.75	C B J	U	0.596
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.92	C B J	U	0.587
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.747
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.823
2,2',3,3',4,6'-HxCB	132	—	3.75	K B J	U	0.859
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.78
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.845
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.08	C B J	U	0.697
2,2',3,3',6,6'-HxCB	136	—	1.57	K B J	U	0.565
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.659
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.752
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.14	J	—	0.664

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-3		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.842
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.693
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.589
2,2',3,4',5,5'-HxCB	146	—	0.845	K J	U	0.633
2,2',3,4',5,6-HxCB	147	147 + 149	7.27	C B J	—	0.763
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.735
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.582
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.539
2,2',4,4',5,5'-HxCB	153	153 + 168	5.75	C B J	U	0.542
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.524
2,3,3',4,4',5-HxCB	156	156 + 157	0.860	C K J	U	0.632
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.863	K J	U	0.524
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.524
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.53
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.531
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.525
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.599
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.524
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.524
2,2',3,3',4,4',5-HpCB	170	—	—	U	—	0.635
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.666
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.635
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.800	K B J	U	0.612
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.572
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.524
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.643
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.582
2,2',3,3',5,6,6'-HpCB	179	—	0.664	K J	U	0.524
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.82	C K B J	U	0.524
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.627
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.581
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.583
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.524
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.524
2,2',3,4',5,5',6-HpCB	187	—	1.52	K B J	U	0.554
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.524

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-3		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.645
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.524
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.524
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.524
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.681
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.762
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.524
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.524
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	0.524
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.524
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.524
2,2',3,4,4',5,5',6-OcCB	203	—	—	U G	—	0.524
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.524
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.554
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.47
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.22
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.32
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.57	B J G	—	0.704
Total PCBs	—	—	34.0	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-4	**Collection Date:** 3/29/2012		**Replicate of L55384-3**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.64	B J	U	0.518
3-MoCB	2	—	1.56	K B J	U	0.518
4-MoCB	3	—	2.72	B J	U	0.518
2,2'-DiCB	4	—	1.27	K J	U	1.05
2,3-DiCB	5	—	—	U	—	0.911
2,3'-DiCB	6	—	—	U	—	0.803
2,4-DiCB	7	—	1.38	J	—	0.841
2,4'-DiCB	8	—	1.56	B J	U	0.749
2,5-DiCB	9	—	—	U	—	0.796
2,6-DiCB	10	—	—	U	—	0.796
3,3'-DiCB	11	—	10.2	B J	U	0.864
3,4-DiCB	12	12 + 13	—	C U	—	0.898
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.839
4,4'-DiCB	15	—	1.70	B J	U	1
2,2',3-TriCB	16	—	—	U	—	0.612
2,2',4-TriCB	17	—	1.83	K J	U	0.518
2,2',5-TriCB	18	18 + 30	1.55	C B J	—	0.518
2,2',6-TriCB	19	—	—	U	—	0.518
2,3,3'-TriCB	20	20 + 28	2.66	C K B J	U	0.518
2,3,4-TriCB	21	21 + 33	2.05	C B J	—	0.518
2,3,4'-TriCB	22	—	0.811	K B J	U	0.518
2,3,5-TriCB	23	—	—	U	—	0.518
2,3,6-TriCB	24	—	—	U	—	0.518
2,3',4-TriCB	25	—	0.683	K J	U	0.518
2,3',5-TriCB	26	26 + 29	—	C U	—	0.518
2,3',6-TriCB	27	—	—	U	—	0.518
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.47	B J	U	0.518
2,4',6-TriCB	32	—	—	U	—	0.518
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.518
3,3',4-TriCB	35	—	—	U	—	0.518
3,3',5-TriCB	36	—	—	U	—	0.518
3,4,4'-TriCB	37	—	0.611	K B J	U	0.518
3,4,5-TriCB	38	—	—	U	—	0.518
3,4',5-TriCB	39	—	—	U	—	0.518
2,2',3,3'-TeCB	40	40 + 41 + 71	1.40	C B J	U	0.518
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.774	J	—	0.518
2,2',3,5-TeCB	43	—	—	U	—	0.538
2,2',3,5'-TeCB	44	44 + 47 + 65	58.2	C B	R1	0.518
2,2',3,6-TeCB	45	45 + 51	31.7	C	R1	0.518
2,2',3,6'-TeCB	46	—	—	U	—	0.528
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		KC Sample ID: L55384-4	Collection Date: 3/29/2012		Replicate of L55384-3	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.518
2,2',4,5'-TeCB	49	49 + 69	3.00	C B J	—	0.518
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.518
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	4.29	K B J	U	0.518
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.518
2,3,3',4-TeCB	55	—	—	U	—	0.617
2,3,3',4'-TeCB	56	—	0.802	K B J	U	0.605
2,3,3',5-TeCB	57	—	—	U	—	0.57
2,3,3',5'-TeCB	58	—	—	U	—	0.588
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.518
2,3,4,4'-TeCB	60	—	—	U	—	0.61
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	5.16	C B J	U	0.587
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.568
2,3,4',6-TeCB	64	—	1.18	K B J	U	0.518
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	1.86	K B J	U	0.562
2,3',4,5-TeCB	67	—	—	U	—	0.518
2,3',4,5'-TeCB	68	—	62.1	—	R1	0.586
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.573
2,3',5',6-TeCB	73	—	—	U	—	0.518
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.629	K B J	U	0.563
3,3',4,5-TeCB	78	—	—	U	—	0.587
3,3',4,5'-TeCB	79	—	—	U	—	0.518
3,3',5,5'-TeCB	80	—	—	U	—	0.536
3,4,4',5-TeCB	81	—	—	U	—	0.593
2,2',3,3',4-PeCB	82	—	1.14	J	—	1.07
2,2',3,3',5-PeCB	83	83 + 99	4.37	C K B J	U	1.01
2,2',3,3',6-PeCB	84	—	2.32	B J	U	1.15
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.78	C B J	U	0.799
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.73	C B J	U	0.847
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.64	C B J	U	0.981
2,2',3,4,6'-PeCB	89	—	—	U	—	1.01
2,2',3,4',5-PeCB	90	90 + 101 + 113	7.02	C B J	U	0.859
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.31	K B J	U	0.982
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.88	C B J	U	0.956
2,2',3,5,6'-PeCB	94	—	—	U	—	1.12

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-4	**Collection Date:**	3/29/2012	**Replicate of L55384-3**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.518
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.922
2,2',4,6,6'-PeCB	104	—	—	U	—	0.518
2,3,3',4,4'-PeCB	105	—	2.51	B J	U	0.752
2,3,3',4,5-PeCB	106	—	—	U	—	0.707
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.764
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.69
2,3,3',4',6-PeCB	110	110 + 115	8.83	C B J	U	0.702
2,3,3',5,5'-PeCB	111	—	—	U	—	0.684
2,3,3',5,6-PeCB	112	—	—	U	—	0.739
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.716
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.15	B J	U	0.708
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.642
2,3',4,5',6-PeCB	121	—	—	U	—	0.721
2',3,3',4,5-PeCB	122	—	—	U	—	0.765
2',3,4,4',5-PeCB	123	—	—	U	—	0.728
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.819
3,3',4,5,5'-PeCB	127	—	—	U	—	0.652
2,2',3,3',4,4'-HxCB	128	128 + 166	1.00	C K B J	U	0.666
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	4.79	C B J	U	0.656
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.834
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.92
2,2',3,3',4,6'-HxCB	132	—	2.03	B J	U	0.96
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.872
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.944
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.89	C K B J	U	0.87
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.705
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.736
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.84
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	0.741

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-4	**Collection Date:** 3/29/2012		**Replicate of L55384-3**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.94
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.866
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.735
2,2',3,4',5,5'-HxCB	146	—	—	U	—	0.707
2,2',3,4',5,6-HxCB	147	147 + 149	3.88	C K B J	U	0.852
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.917
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.726
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.673
2,2',4,4',5,5'-HxCB	153	153 + 168	4.32	C K B J	U	0.606
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.518
2,3,3',4,4',5-HxCB	156	156 + 157	—	C U	—	0.734
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.518
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.566
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.592
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.593
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.587
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.669
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.538
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.518
2,2',3,3',4,4',5-HpCB	170	—	0.884	K B J	U	0.679
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.77
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.735
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	0.708
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.662
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.528
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.745
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.673
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.544
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.25	C B J	—	0.625
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.725
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.673
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.675
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.523
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.539
2,2',3,4',5,5',6-HpCB	187	—	0.672	K B J	U	0.641
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.518

Table B2-2. PCB Congener AXYS Analytical Data for Green River - Flaming Geyser (FG319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-4	**Collection Date:**	3/29/2012	**Replicate of L55384-3**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.599
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.53
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.535
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.587
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.865
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.968
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.596
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.518
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	0.612
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.518
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.518
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.564
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.518
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.713
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.32
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.88
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	0.817	B J	—	0.768
Total PCBs	—	—	12.0	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-1		**Collection Date:** 9/6/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.99	B J	U	0.597
3-MoCB	2	—	1.19	B J	U	0.597
4-MoCB	3	—	3.48	B J	U	0.597
2,2'-DiCB	4	—	4.26	J	—	1.46
2,3-DiCB	5	—	—	U	—	1.33
2,3'-DiCB	6	—	2.15	J	—	1.14
2,4-DiCB	7	—	—	U	—	1.16
2,4'-DiCB	8	—	10.7	B J	—	1.02
2,5-DiCB	9	—	—	U	—	1.14
2,6-DiCB	10	—	—	U	—	1.14
3,3'-DiCB	11	—	19.6	B J	U	1.25
3,4-DiCB	12	12 + 13	—	C U	—	1.23
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.21
4,4'-DiCB	15	—	7.17	B J	U	1.23
2,2',3-TriCB	16	—	5.58	B J	—	0.597
2,2',4-TriCB	17	—	7.21	K B J	U	0.597
2,2',5-TriCB	18	18 + 30	11.9	C B J	—	0.597
2,2',6-TriCB	19	—	1.78	J	—	0.597
2,3,3'-TriCB	20	20 + 28	20.3	C B J	U	0.597
2,3,4-TriCB	21	21 + 33	10.7	C B J	—	0.597
2,3,4'-TriCB	22	—	6.57	B J	U	0.597
2,3,5-TriCB	23	—	0.703	J	—	0.597
2,3,6-TriCB	24	—	—	U	—	0.597
2,3',4-TriCB	25	—	1.15	J	—	0.597
2,3',5-TriCB	26	26 + 29	3.23	C J	—	0.597
2,3',6-TriCB	27	—	0.806	J	—	0.597
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	15.8	B J	—	0.597
2,4',6-TriCB	32	—	3.93	B J	U	0.597
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.597
3,3',4-TriCB	35	—	—	U	—	0.597
3,3',5-TriCB	36	—	—	U	—	0.597
3,4,4'-TriCB	37	—	6.10	B J	U	0.597
3,4,5-TriCB	38	—	—	U	—	0.597
3,4',5-TriCB	39	—	—	U	—	0.597
2,2',3,3'-TeCB	40	40 + 41 + 71	4.95	C B J	U	0.597
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.93	K B J	U	0.597
2,2',3,5-TeCB	43	—	—	U	—	0.597
2,2',3,5'-TeCB	44	44 + 47 + 65	42.0	C B	R1	0.597
2,2',3,6-TeCB	45	45 + 51	15.7	C B J	R1	0.597
2,2',3,6'-TeCB	46	—	0.647	K J	U	0.597
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-1		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	2.34	B J	—	0.597
2,2',4,5'-TeCB	49	49 + 69	8.61	C B J	—	0.597
2,2',4,6-TeCB	50	50 + 53	1.14	C B J	U	0.597
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	26.1	B	—	0.597
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.597
2,3,3',4-TeCB	55	—	—	U	—	0.597
2,3,3',4'-TeCB	56	—	6.49	B J	—	0.597
2,3,3',5-TeCB	57	—	—	U	—	0.597
2,3,3',5'-TeCB	58	—	—	U	—	0.597
2,3,3',6-TeCB	59	59 + 62 + 75	1.05	C J	—	0.597
2,3,4,4'-TeCB	60	—	3.42	B J	U	0.597
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	36.1	C B	—	0.597
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.597
2,3,4',6-TeCB	64	—	4.42	B J	—	0.597
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	14.3	B J	—	0.597
2,3',4,5-TeCB	67	—	—	U	—	0.597
2,3',4,5'-TeCB	68	—	17.3	J	R1	0.597
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.597
2,3',5',6-TeCB	73	—	—	U	—	0.597
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.75	B J	U	0.597
3,3',4,5-TeCB	78	—	—	U	—	0.597
3,3',4,5'-TeCB	79	—	—	U	—	0.597
3,3',5,5'-TeCB	80	—	—	U	—	0.597
3,4,4',5-TeCB	81	—	2.14	K J	U	0.597
2,2',3,3',4-PeCB	82	—	3.19	B J	—	0.597
2,2',3,3',5-PeCB	83	83 + 99	19.1	C B J	—	0.597
2,2',3,3',6-PeCB	84	—	5.45	B J	U	0.597
2,2',3,4,4'-PeCB	85	85 + 116 + 117	5.41	C B J	—	0.597
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	21.5	C B J	—	0.597
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.87	C B J	—	0.597
2,2',3,4,6'-PeCB	89	—	—	U	—	0.597
2,2',3,4',5-PeCB	90	90 + 101 + 113	31.5	C B	—	0.597
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.69	K B J	U	0.597
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	17.9	C B J	—	0.597
2,2',3,5,6'-PeCB	94	—	—	U	—	0.597

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54090-1		Collection Date: 9/6/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.597
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.597
2,2',4,6,6'-PeCB	104	—	—	U	—	0.597
2,3,3',4,4'-PeCB	105	—	16.4	B J	—	0.597
2,3,3',4,5-PeCB	106	—	—	U	—	0.597
2,3,3',4',5-PeCB	107	107 + 124	1.20	C J	—	0.597
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.53	K J	U	0.597
2,3,3',4',6-PeCB	110	110 + 115	34.4	C B	—	0.597
2,3,3',5,5'-PeCB	111	—	—	U	—	0.597
2,3,3',5,6-PeCB	112	—	—	U	—	0.597
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	2.52	J	—	0.597
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	39.9	B	—	0.597
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.597
2,3',4,5',6-PeCB	121	—	—	U	—	0.597
2',3,3',4,5-PeCB	122	—	—	U	—	0.597
2',3,4,4',5-PeCB	123	—	2.13	J	—	0.597
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.95	K J	U	0.597
3,3',4,5,5'-PeCB	127	—	—	U	—	0.597
2,2',3,3',4,4'-HxCB	128	128 + 166	4.15	C J	—	0.597
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	23.6	C B J	—	0.597
2,2',3,3',4,5'-HxCB	130	—	1.43	K B J	U	0.597
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.597
2,2',3,3',4,6'-HxCB	132	—	5.43	K J	U	0.597
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.597
2,2',3,3',5,6-HxCB	134	134 + 143	0.943	C K J	U	0.597
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.40	C J	—	0.597
2,2',3,3',6,6'-HxCB	136	—	1.38	J	—	0.597
2,2',3,4,4',5-HxCB	137	—	2.01	J	—	0.597
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.872	C J	—	0.597
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.49	J	—	0.597

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-1		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.597
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.597
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.597
2,2',3,4',5,5'-HxCB	146	—	3.15	J	—	0.597
2,2',3,4',5,6-HxCB	147	147 + 149	10.1	C B J	U	0.597
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.597
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.597
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.597
2,2',4,4',5,5'-HxCB	153	153 + 168	18.7	C B J	—	0.597
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	0.826	J	—	0.597
2,3,3',4,4',5-HxCB	156	156 + 157	6.93	C B J	—	0.597
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.68	J	—	0.597
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.597
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.597
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.597
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.36	K J	U	0.597
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.597
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	3.42	J	—	0.597
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	1.28	J	—	0.597
2,2',3,3',4,4',5-HpCB	170	—	2.91	B J	—	0.597
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.597
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.597
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.22	K B J	U	0.597
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.597
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.597
2,2',3,3',4',5,6-HpCB	177	—	0.897	J	—	0.597
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.597
2,2',3,3',5,6,6'-HpCB	179	—	0.844	K J	U	0.597
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.84	C K B J	U	0.597
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.597
2,2',3,4,4',5,6'-HpCB	182	—	1.20	J	—	0.597
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.36	C B J	—	0.597
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.597
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.597
2,2',3,4',5,5',6-HpCB	187	—	4.29	K B J	U	0.597
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.597

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-1		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	1.09	K J	U	0.597
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.597
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.597
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.597
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.72	K B J	U	0.597
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.597
2,2',3,3',4,4',5,6'-OcCB	196	—	0.758	K J	U	0.597
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.597
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.36	C B J	—	0.597
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.597
2,2',3,3',5,5',6,6'-OcCB	202	—	0.660	K J	U	0.597
2,2',3,4,4',5,5',6-OcCB	203	—	0.688	K B J	U	0.597
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.597
2,3,3',4,4',5,5',6-OcCB	205	—	0.960	K J	U	0.597
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.09
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.955
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.878
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.09	K B J	U	0.597
Total PCBs	—	—	452	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-1		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.46	B J	U	0.567
3-MoCB	2	—	1.40	B J	U	0.567
4-MoCB	3	—	3.01	B J	U	0.567
2,2'-DiCB	4	—	1.62	J	—	1.4
2,3-DiCB	5	—	—	U	—	1.22
2,3'-DiCB	6	—	—	U	—	1.1
2,4-DiCB	7	—	—	U	—	1.11
2,4'-DiCB	8	—	4.52	B J	U	1.01
2,5-DiCB	9	—	—	U	—	1.07
2,6-DiCB	10	—	—	U	—	1.06
3,3'-DiCB	11	—	12.2	B J	U	1.16
3,4-DiCB	12	12 + 13	—	C U	—	1.18
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.13
4,4'-DiCB	15	—	3.16	B J	U	1.09
2,2',3-TriCB	16	—	2.46	B J	U	0.567
2,2',4-TriCB	17	—	2.54	B J	U	0.567
2,2',5-TriCB	18	18 + 30	4.02	C B J	U	0.567
2,2',6-TriCB	19	—	—	U	—	0.567
2,3,3'-TriCB	20	20 + 28	5.73	C B J	U	0.567
2,3,4-TriCB	21	21 + 33	2.64	C B J	U	0.567
2,3,4'-TriCB	22	—	1.69	B J	U	0.567
2,3,5-TriCB	23	—	—	U	—	0.567
2,3,6-TriCB	24	—	—	U	—	0.567
2,3',4-TriCB	25	—	—	U	—	0.567
2,3',5-TriCB	26	26 + 29	0.825	C J	—	0.567
2,3',6-TriCB	27	—	—	U	—	0.567
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.15	B J	U	0.567
2,4',6-TriCB	32	—	0.792	B J	U	0.567
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.567
3,3',4-TriCB	35	—	—	U	—	0.567
3,3',5-TriCB	36	—	—	U	—	0.567
3,4,4'-TriCB	37	—	1.33	B J	U	0.567
3,4,5-TriCB	38	—	—	U	—	0.567
3,4',5-TriCB	39	—	—	U	—	0.567
2,2',3,3'-TeCB	40	40 + 41 + 71	2.34	C B J	U	0.567
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.766	K B J	U	0.567
2,2',3,5-TeCB	43	—	—	U	—	0.567
2,2',3,5'-TeCB	44	44 + 47 + 65	20.3	C B J	R1	0.567
2,2',3,6-TeCB	45	45 + 51	8.51	C B J	R1	0.567
2,2',3,6'-TeCB	46	—	—	U	—	0.567
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-1		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.567
2,2',4,5'-TeCB	49	49 + 69	2.84	C B J	U	0.567
2,2',4,6-TeCB	50	50 + 53	0.726	C K B J	U	0.567
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.37	B J	—	0.567
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.567
2,3,3',4-TeCB	55	—	—	U	—	0.58
2,3,3',4'-TeCB	56	—	1.33	B J	—	0.567
2,3,3',5-TeCB	57	—	—	U	—	0.567
2,3,3',5'-TeCB	58	—	—	U	—	0.567
2,3,3',6-TeCB	59	59 + 62 + 75	0.647	C K J	U	0.567
2,3,4,4'-TeCB	60	—	0.630	K B J	U	0.567
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.57	C B J	U	0.567
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.567
2,3,4',6-TeCB	64	—	1.40	K B J	U	0.567
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.60	B J	U	0.567
2,3',4,5-TeCB	67	—	—	U	—	0.567
2,3',4,5'-TeCB	68	—	24.2	—	R1	0.567
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.567
2,3',5',6-TeCB	73	—	—	U	—	0.567
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.835	B J	U	0.567
3,3',4,5-TeCB	78	—	—	U	—	0.567
3,3',4,5'-TeCB	79	—	—	U	—	0.567
3,3',5,5'-TeCB	80	—	—	U	—	0.567
3,4,4',5-TeCB	81	—	—	U	—	0.567
2,2',3,3',4-PeCB	82	—	0.874	B J	—	0.567
2,2',3,3',5-PeCB	83	83 + 99	4.61	C B J	—	0.567
2,2',3,3',6-PeCB	84	—	1.72	B J	U	0.567
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.82	C K B J	U	0.567
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.31	C K B J	U	0.567
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	0.976	C B J	—	0.567
2,2',3,4,6'-PeCB	89	—	—	U	—	0.567
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.62	C B J	U	0.567
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.27	B J	—	0.567
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	6.24	C B J	U	0.567
2,2',3,5,6'-PeCB	94	—	—	U	—	0.567

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-1		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.567
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.567
2,2',4,6,6'-PeCB	104	—	—	U	—	0.567
2,3,3',4,4'-PeCB	105	—	2.87	B J	U	0.567
2,3,3',4,5-PeCB	106	—	—	U	—	0.567
2,3,3',4',5-PeCB	107	107 + 124	0.627	C K J	U	0.567
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.614	K J	U	0.567
2,3,3',4',6-PeCB	110	110 + 115	7.98	C B J	U	0.567
2,3,3',5,5'-PeCB	111	—	—	U	—	0.567
2,3,3',5,6-PeCB	112	—	—	U	—	0.567
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.736	J	—	0.567
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.73	B J	U	0.567
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.567
2,3',4,5',6-PeCB	121	—	—	U	—	0.567
2',3,3',4,5-PeCB	122	—	—	U	—	0.567
2',3,4,4',5-PeCB	123	—	—	U	—	0.567
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.567
3,3',4,5,5'-PeCB	127	—	—	U	—	0.567
2,2',3,3',4,4'-HxCB	128	128 + 166	1.95	C J	—	0.567
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	8.03	C B J	—	0.567
2,2',3,3',4,5'-HxCB	130	—	0.731	K B J	U	0.567
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.567
2,2',3,3',4,6'-HxCB	132	—	2.44	K J	U	0.567
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.567
2,2',3,3',5,6-HxCB	134	134 + 143	0.670	C K J	U	0.567
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.73	C J	—	0.567
2,2',3,3',6,6'-HxCB	136	—	0.603	K J	U	0.567
2,2',3,4,4',5-HxCB	137	—	0.876	K J	U	0.567
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.567
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.32	K J	U	0.567

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-1		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.567
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.567
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.567
2,2',3,4',5,5'-HxCB	146	—	1.28	K J	U	0.567
2,2',3,4',5,6-HxCB	147	147 + 149	4.89	C B J	U	0.567
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.567
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.567
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.567
2,2',4,4',5,5'-HxCB	153	153 + 168	4.81	C K B J	U	0.567
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.567
2,3,3',4,4',5-HxCB	156	156 + 157	1.99	C B J	—	0.567
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.12	K J	U	0.567
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.567
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.567
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.567
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.963	K J	U	0.567
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.567
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.977	J	—	0.567
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	0.689	K J	U	0.567
2,2',3,3',4,4',5-HpCB	170	—	1.73	B J	—	0.567
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.710	C K J	U	0.567
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.567
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.46	K B J	U	0.567
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.567
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.567
2,2',3,3',4',5,6-HpCB	177	—	1.00	K J	U	0.567
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.567
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.567
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.48	C B J	—	0.567
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.567
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.567
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.15	C B J	—	0.567
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.567
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.567
2,2',3,4',5,5',6-HpCB	187	—	1.86	B J	U	0.567
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.567

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-1		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.595	J	—	0.567
2,3,3',4,4',5,6-HpCB	190	—	0.792	K J	U	0.567
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.567
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.567
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.32	B J	—	0.567
2,2',3,3',4,4',5,6-OcCB	195	—	0.695	K J	U	0.567
2,2',3,3',4,4',5,6'-OcCB	196	—	0.809	J	—	0.567
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.610	C K J	U	0.567
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.50	C B J	—	0.567
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.567
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.567
2,2',3,4,4',5,5',6-OcCB	203	—	1.19	B J	—	0.567
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.567
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.567
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.19	J	—	0.834
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.718
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.707
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.56	B J	U	0.567
Total PCBs	—	—	45.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-1		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.29	B J	U	0.538
3-MoCB	2	—	1.01	K B J	U	0.538
4-MoCB	3	—	2.71	B J	U	0.538
2,2'-DiCB	4	—	—	U	—	1.95
2,3-DiCB	5	—	—	U	—	1.76
2,3'-DiCB	6	—	—	U	—	1.59
2,4-DiCB	7	—	—	U	—	1.61
2,4'-DiCB	8	—	2.90	B J	U	1.46
2,5-DiCB	9	—	—	U	—	1.54
2,6-DiCB	10	—	—	U	—	1.53
3,3'-DiCB	11	—	11.9	B J	U	1.67
3,4-DiCB	12	12 + 13	—	C U	—	1.7
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.63
4,4'-DiCB	15	—	2.46	B J	U	1.61
2,2',3-TriCB	16	—	1.63	K B J	U	0.538
2,2',4-TriCB	17	—	1.29	B J	U	0.538
2,2',5-TriCB	18	18 + 30	2.92	C K B J	U	0.538
2,2',6-TriCB	19	—	—	U	—	0.538
2,3,3'-TriCB	20	20 + 28	4.00	C B J	U	0.538
2,3,4-TriCB	21	21 + 33	2.02	C B J	U	0.538
2,3,4'-TriCB	22	—	1.46	K B J	U	0.538
2,3,5-TriCB	23	—	—	U	—	0.538
2,3,6-TriCB	24	—	—	U	—	0.538
2,3',4-TriCB	25	—	—	U	—	0.538
2,3',5-TriCB	26	26 + 29	0.704	C J	—	0.538
2,3',6-TriCB	27	—	—	U	—	0.538
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.16	B J	U	0.538
2,4',6-TriCB	32	—	0.964	B J	U	0.538
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.538
3,3',4-TriCB	35	—	—	U	—	0.538
3,3',5-TriCB	36	—	—	U	—	0.538
3,4,4'-TriCB	37	—	0.823	K B J	U	0.538
3,4,5-TriCB	38	—	—	U	—	0.538
3,4',5-TriCB	39	—	—	U	—	0.538
2,2',3,3'-TeCB	40	40 + 41 + 71	1.43	C B J	U	0.538
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.693	B J	—	0.538
2,2',3,5-TeCB	43	—	—	U	—	0.538
2,2',3,5'-TeCB	44	44 + 47 + 65	25.9	C B	R1	0.538
2,2',3,6-TeCB	45	45 + 51	23.8	C B	R1	0.538
2,2',3,6'-TeCB	46	—	—	U	—	0.538
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-1		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.662	K B J	U	0.538
2,2',4,5'-TeCB	49	49 + 69	2.32	C B J	U	0.538
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.538
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	4.47	K B J	U	0.538
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.538
2,3,3',4-TeCB	55	—	—	U	—	0.538
2,3,3',4'-TeCB	56	—	1.28	B J	—	0.538
2,3,3',5-TeCB	57	—	—	U	—	0.538
2,3,3',5'-TeCB	58	—	—	U	—	0.538
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.538
2,3,4,4'-TeCB	60	—	0.643	B J	U	0.538
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	5.89	C B J	U	0.538
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.538
2,3,4',6-TeCB	64	—	1.12	B J	—	0.538
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.38	B J	U	0.538
2,3',4,5-TeCB	67	—	—	U	—	0.538
2,3',4,5'-TeCB	68	—	12.0	J	R1	0.538
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.538
2,3',5',6-TeCB	73	—	—	U	—	0.538
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.538
3,3',4,5-TeCB	78	—	—	U	—	0.538
3,3',4,5'-TeCB	79	—	—	U	—	0.538
3,3',5,5'-TeCB	80	—	—	U	—	0.538
3,4,4',5-TeCB	81	—	—	U	—	0.538
2,2',3,3',4-PeCB	82	—	1.19	B J	—	0.538
2,2',3,3',5-PeCB	83	83 + 99	3.99	C B J	—	0.538
2,2',3,3',6-PeCB	84	—	2.19	K B J	U	0.538
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.69	C B J	—	0.538
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	5.74	C B J	—	0.538
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	0.743	C K B J	U	0.538
2,2',3,4,6'-PeCB	89	—	—	U	—	0.538
2,2',3,4',5-PeCB	90	90 + 101 + 113	7.08	C B J	U	0.538
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.24	K B J	U	0.538
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.96	C B J	U	0.538
2,2',3,5,6'-PeCB	94	—	—	U	—	0.538

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-1		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.538
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.538
2,2',4,6,6'-PeCB	104	—	—	U	—	0.538
2,3,3',4,4'-PeCB	105	—	2.52	B J	U	0.538
2,3,3',4,5-PeCB	106	—	—	U	—	0.538
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.538
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.538
2,3,3',4',6-PeCB	110	110 + 115	7.80	C B J	U	0.538
2,3,3',5,5'-PeCB	111	—	—	U	—	0.538
2,3,3',5,6-PeCB	112	—	—	U	—	0.538
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.538
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.58	B J	U	0.538
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.538
2,3',4,5',6-PeCB	121	—	—	U	—	0.538
2',3,3',4,5-PeCB	122	—	—	U	—	0.538
2',3,4,4',5-PeCB	123	—	—	U	—	0.538
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.538
3,3',4,5,5'-PeCB	127	—	—	U	—	0.538
2,2',3,3',4,4'-HxCB	128	128 + 166	1.80	C K J	U	0.538
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	7.83	C B J	—	0.538
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.538
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.538
2,2',3,3',4,6'-HxCB	132	—	3.68	J	—	0.538
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.538
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.538
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.50	C J	—	0.538
2,2',3,3',6,6'-HxCB	136	—	0.590	K J	U	0.538
2,2',3,4,4',5-HxCB	137	—	0.578	K J	U	0.538
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.538
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.701	K J	U	0.538

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-1		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.538
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.538
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.538
2,2',3,4',5,5'-HxCB	146	—	0.684	K J	U	0.538
2,2',3,4',5,6-HxCB	147	147 + 149	5.49	C K B J	U	0.538
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.538
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.538
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.538
2,2',4,4',5,5'-HxCB	153	153 + 168	4.73	C K B J	U	0.538
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.538
2,3,3',4,4',5-HxCB	156	156 + 157	0.960	C K B J	U	0.538
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.793	J	—	0.538
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.538
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.538
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.538
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.658	K J	U	0.538
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.538
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.538
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.538
2,2',3,3',4,4',5-HpCB	170	—	1.42	B J	—	0.538
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.538
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.538
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.20	K B J	U	0.538
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.538
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.538
2,2',3,3',4',5,6-HpCB	177	—	0.653	K J	U	0.538
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.538
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.538
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.94	C B J	—	0.538
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.538
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.538
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.759	C B J	—	0.538
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.538
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.538
2,2',3,4',5,5',6-HpCB	187	—	1.33	B J	U	0.538
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.538

Table B2-3. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-1		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.538
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.538
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.538
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.538
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	0.538
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.538
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.538
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.538
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.11	C B J	—	0.538
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.538
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.538
2,2',3,4,4',5,5',6-OcCB	203	—	0.559	K B J	U	0.538
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.538
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.538
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.29	K J	U	1.14
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.984
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.97
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.71	B J	U	0.538
Total PCBs	—	—	35.4	—	J	—

B = Detected in method blank

J = Estimated value

U = Not detected

C = Coelution

C# = Coelution with #, concentration listed under #

K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration

Lab Qual = Lab Qualifier

Val Qual= Validation Qualifier

SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-1		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.62	B J	U	0.567
3-MoCB	2	—	2.96	B J	U	0.567
4-MoCB	3	—	8.93	B J	U	0.567
2,2'-DiCB	4	—	—	U	—	5.79
2,3-DiCB	5	—	—	U	—	4.55
2,3'-DiCB	6	—	—	U	—	4.13
2,4-DiCB	7	—	—	U	—	4.3
2,4'-DiCB	8	—	—	U	—	3.95
2,5-DiCB	9	—	—	U	—	4.02
2,6-DiCB	10	—	—	U	—	4.17
3,3'-DiCB	11	—	7.90	K B J	U	4.44
3,4-DiCB	12	12 + 13	—	C U	—	4.5
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	4.23
4,4'-DiCB	15	—	6.51	K B J	U	4.73
2,2',3-TriCB	16	—	—	U	—	0.897
2,2',4-TriCB	17	—	6.18	J	—	0.725
2,2',5-TriCB	18	18 + 30	1.81	C K B J	U	0.608
2,2',6-TriCB	19	—	—	U	—	0.645
2,3,3'-TriCB	20	20 + 28	4.90	C B J	U	0.567
2,3,4-TriCB	21	21 + 33	1.70	C B J	U	0.567
2,3,4'-TriCB	22	—	0.809	B J	—	0.567
2,3,5-TriCB	23	—	—	U	—	0.567
2,3,6-TriCB	24	—	—	U	—	0.567
2,3',4-TriCB	25	—	2.86	J	—	0.567
2,3',5-TriCB	26	26 + 29	—	C U	—	0.567
2,3',6-TriCB	27	—	—	U	—	0.567
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.05	B J	U	0.567
2,4',6-TriCB	32	—	—	U	—	0.567
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.567
3,3',4-TriCB	35	—	—	U	—	0.567
3,3',5-TriCB	36	—	—	U	—	0.567
3,4,4'-TriCB	37	—	—	U	—	0.567
3,4,5-TriCB	38	—	—	U	—	0.567
3,4',5-TriCB	39	—	—	U	—	0.567
2,2',3,3'-TeCB	40	40 + 41 + 71	—	C U	—	0.899
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.939
2,2',3,5-TeCB	43	—	—	U	—	1.09
2,2',3,5'-TeCB	44	44 + 47 + 65	58.1	C B	R1	0.824
2,2',3,6-TeCB	45	45 + 51	14.7	C J	R1	0.89
2,2',3,6'-TeCB	46	—	—	U	—	1.03
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-1		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.903
2,2',4,5'-TeCB	49	49 + 69	3.40	C B J	—	0.769
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.866
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	4.49	B J	U	0.822
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.57
2,3,3',4-TeCB	55	—	—	U	—	1.28
2,3,3',4'-TeCB	56	—	—	U	—	1.24
2,3,3',5-TeCB	57	—	—	U	—	1.21
2,3,3',5'-TeCB	58	—	—	U	—	1.21
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.684
2,3,4,4'-TeCB	60	—	—	U	—	1.26
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	4.46	C B J	—	1.2
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.14
2,3,4',6-TeCB	64	—	1.07	B J	U	0.658
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	1.92	B J	U	1.12
2,3',4,5-TeCB	67	—	—	U	—	1.07
2,3',4,5'-TeCB	68	—	39.3	—	R1	1.18
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.15
2,3',5',6-TeCB	73	—	—	U	—	0.666
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.15
3,3',4,5-TeCB	78	—	—	U	—	1.19
3,3',4,5'-TeCB	79	—	—	U	—	1.01
3,3',5,5'-TeCB	80	—	—	U	—	1.09
3,4,4',5-TeCB	81	—	—	U	—	1.13
2,2',3,3',4-PeCB	82	—	—	U	—	0.567
2,2',3,3',5-PeCB	83	83 + 99	4.47	C B J	—	0.567
2,2',3,3',6-PeCB	84	—	1.83	K J	U	0.567
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.23	C J	—	0.567
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	3.81	C B J	—	0.567
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	0.885	C K J	U	0.567
2,2',3,4,6'-PeCB	89	—	—	U	—	0.567
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.80	C B J	U	0.567
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.20	J	—	0.567
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.09	C B J	U	0.567
2,2',3,5,6'-PeCB	94	—	—	U	—	0.567

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-1		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.567
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.567
2,2',4,6,6'-PeCB	104	—	—	U	—	0.567
2,3,3',4,4'-PeCB	105	—	2.78	K B J	U	0.567
2,3,3',4,5-PeCB	106	—	—	U	—	0.567
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.567
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.567
2,3,3',4',6-PeCB	110	110 + 115	6.13	C B J	—	0.567
2,3,3',5,5'-PeCB	111	—	—	U	—	0.567
2,3,3',5,6-PeCB	112	—	—	U	—	0.567
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.567
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.70	K B J	U	0.567
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.567
2,3',4,5',6-PeCB	121	—	—	U	—	0.567
2',3,3',4,5-PeCB	122	—	—	U	—	0.567
2',3,4,4',5-PeCB	123	—	—	U	—	0.567
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.567
3,3',4,5,5'-PeCB	127	—	—	U	—	0.567
2,2',3,3',4,4'-HxCB	128	128 + 166	1.10	C K J	U	0.567
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	9.18	C B J	—	0.567
2,2',3,3',4,5'-HxCB	130	—	0.669	J	—	0.567
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.567
2,2',3,3',4,6'-HxCB	132	—	2.49	K J	U	0.567
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.567
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.567
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.57	C B J	—	0.567
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.567
2,2',3,4,4',5-HxCB	137	—	0.652	K J	U	0.567
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.567
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.63	J	—	0.567

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-1		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.567
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.567
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.567
2,2',3,4',5,5'-HxCB	146	—	0.878	K J	U	0.567
2,2',3,4',5,6-HxCB	147	147 + 149	3.99	C B J	—	0.567
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.567
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.567
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.567
2,2',4,4',5,5'-HxCB	153	153 + 168	7.40	C B J	—	0.567
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.567
2,3,3',4,4',5-HxCB	156	156 + 157	0.744	C K J	U	0.567
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.845	J	—	0.567
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.567
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.567
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.567
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.567
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.567
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.567
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.567
2,2',3,3',4,4',5-HpCB	170	—	1.41	J	—	0.567
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.567
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.567
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.29	J	—	0.567
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.567
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.567
2,2',3,3',4',5,6-HpCB	177	—	0.796	J	—	0.567
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.567
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.567
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.96	C J	—	0.567
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.567
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.567
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.775	C K J	U	0.567
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.567
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.567
2,2',3,4',5,5',6-HpCB	187	—	1.65	K B J	U	0.567
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.567

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-1		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.567
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.567
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.567
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.567
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.853	K J	U	0.567
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.567
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.567
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.567
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.59	C J	—	0.567
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.567
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.567
2,2',3,4,4',5,5',6-OcCB	203	—	0.917	K J	U	0.567
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.567
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.567
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.87
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.18
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.34
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.67	B J	—	0.567
Total PCBs	—	—	70.6	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-1		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.47	B J	U	0.513
3-MoCB	2	—	2.75	B J	U	0.513
4-MoCB	3	—	7.70	B J	U	0.513
2,2'-DiCB	4	—	—	U	—	3.11
2,3-DiCB	5	—	—	U	—	2.78
2,3'-DiCB	6	—	—	U	—	2.53
2,4-DiCB	7	—	4.22	K B J	U	2.62
2,4'-DiCB	8	—	—	U	—	2.38
2,5-DiCB	9	—	—	U	—	2.5
2,6-DiCB	10	—	—	U	—	2.58
3,3'-DiCB	11	—	7.76	B J	—	2.71
3,4-DiCB	12	12 + 13	—	C U	—	2.74
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.62
4,4'-DiCB	15	—	4.50	B J	U	3.03
2,2',3-TriCB	16	—	0.629	J	—	0.517
2,2',4-TriCB	17	—	7.10	J	—	0.513
2,2',5-TriCB	18	18 + 30	1.94	C B J	—	0.513
2,2',6-TriCB	19	—	—	U	—	0.513
2,3,3'-TriCB	20	20 + 28	5.21	C B J	U	0.513
2,3,4-TriCB	21	21 + 33	6.00	C B J	—	0.513
2,3,4'-TriCB	22	—	0.656	K B J	U	0.513
2,3,5-TriCB	23	—	—	U	—	0.513
2,3,6-TriCB	24	—	—	U	—	0.513
2,3',4-TriCB	25	—	2.68	J	—	0.513
2,3',5-TriCB	26	26 + 29	—	C U	—	0.513
2,3',6-TriCB	27	—	—	U	—	0.513
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.72	B J	U	0.513
2,4',6-TriCB	32	—	0.567	J	—	0.513
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.513
3,3',4-TriCB	35	—	—	U	—	0.513
3,3',5-TriCB	36	—	—	U	—	0.513
3,4,4'-TriCB	37	—	0.700	J	—	0.513
3,4,5-TriCB	38	—	—	U	—	0.513
3,4',5-TriCB	39	—	—	U	—	0.513
2,2',3,3'-TeCB	40	40 + 41 + 71	1.64	C J	—	0.886
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.38	K J	U	0.916
2,2',3,5-TeCB	43	—	—	U	—	1.08
2,2',3,5'-TeCB	44	44 + 47 + 65	525	C B	R1	0.815
2,2',3,6-TeCB	45	45 + 51	140	C	R1	0.87
2,2',3,6'-TeCB	46	—	—	U	—	0.995
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-1		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.873
2,2',4,5'-TeCB	49	49 + 69	10.5	C B J	—	0.752
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.849
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	3.57	B J	U	0.815
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.513
2,3,3',4-TeCB	55	—	—	U	—	1.39
2,3,3',4'-TeCB	56	—	—	U	—	1.39
2,3,3',5-TeCB	57	—	—	U	—	1.31
2,3,3',5'-TeCB	58	—	—	U	—	1.33
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.685
2,3,4,4'-TeCB	60	—	—	U	—	1.39
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	3.59	C B J	—	1.32
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.26
2,3,4',6-TeCB	64	—	—	U	—	0.658
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.88	B J	U	1.26
2,3',4,5-TeCB	67	—	—	U	—	1.18
2,3',4,5'-TeCB	68	—	210	—	R1	1.25
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.27
2,3',5',6-TeCB	73	—	—	U	—	0.66
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.43
3,3',4,5-TeCB	78	—	—	U	—	1.32
3,3',4,5'-TeCB	79	—	—	U	—	1.16
3,3',5,5'-TeCB	80	—	—	U	—	1.24
3,4,4',5-TeCB	81	—	—	U	—	1.38
2,2',3,3',4-PeCB	82	—	—	U	—	0.513
2,2',3,3',5-PeCB	83	83 + 99	5.93	C B J	—	0.513
2,2',3,3',6-PeCB	84	—	1.43	K J	U	0.513
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.17	C K J	U	0.513
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	3.77	C B J	—	0.513
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.40	C J	—	0.513
2,2',3,4,6'-PeCB	89	—	—	U	—	0.513
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.40	C B J	U	0.513
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.20	K J	U	0.513
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	4.97	C B J	U	0.513
2,2',3,5,6'-PeCB	94	—	—	U	—	0.513

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		KC Sample ID: L55077-1		Collection Date: 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.513
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.513
2,2',4,6,6'-PeCB	104	—	—	U	—	0.513
2,3,3',4,4'-PeCB	105	—	1.83	B J	—	0.513
2,3,3',4,5-PeCB	106	—	—	U	—	0.513
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.513
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.513
2,3,3',4',6-PeCB	110	110 + 115	5.92	C B J	—	0.513
2,3,3',5,5'-PeCB	111	—	—	U	—	0.513
2,3,3',5,6-PeCB	112	—	—	U	—	0.513
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.513
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.72	K B J	U	0.513
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.513
2,3',4,5',6-PeCB	121	—	—	U	—	0.513
2',3,3',4,5-PeCB	122	—	—	U	—	0.513
2',3,4,4',5-PeCB	123	—	—	U	—	0.513
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.513
3,3',4,5,5'-PeCB	127	—	—	U	—	0.513
2,2',3,3',4,4'-HxCB	128	128 + 166	1.08	C K J	U	0.513
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	7.53	C B J	—	0.513
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.513
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.513
2,2',3,3',4,6'-HxCB	132	—	1.53	J	—	0.513
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.513
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.513
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.79	C B J	—	0.513
2,2',3,3',6,6'-HxCB	136	—	0.747	K J	U	0.513
2,2',3,4,4',5-HxCB	137	—	0.672	K J	U	0.513
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.726	C K J	U	0.513
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.03	K J	U	0.513

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-1		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.513
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.513
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.513
2,2',3,4',5,5'-HxCB	146	—	0.817	K J	U	0.513
2,2',3,4',5,6-HxCB	147	147 + 149	4.55	C B J	—	0.513
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.513
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.513
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.513
2,2',4,4',5,5'-HxCB	153	153 + 168	6.65	C B J	—	0.513
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.513
2,3,3',4,4',5-HxCB	156	156 + 157	0.706	C J	—	0.513
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.513
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.513
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.513
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.513
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.513
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.513
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.513
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.513
2,2',3,3',4,4',5-HpCB	170	—	0.910	J	—	0.513
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.513
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.513
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.03	J	—	0.513
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.513
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.513
2,2',3,3',4',5,6-HpCB	177	—	0.518	K J	U	0.513
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.513
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.513
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.71	C J	—	0.513
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.513
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.513
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.513
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.513
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.513
2,2',3,4',5,5',6-HpCB	187	—	2.16	B J G	U	0.513
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.513

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-1		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.513
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.513
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.513
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.513
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.991	J	—	0.513
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.513
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.513
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	0.513
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.32	C K J	U	0.513
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.513
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.513
2,2',3,4,4',5,5',6-OcCB	203	—	0.756	J	—	0.513
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.513
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.513
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.96
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.18
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.14
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.77	B J	—	0.513
Total PCBs	—	—	92.9	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-1		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.12	B J	U	0.519
3-MoCB	2	—	2.42	B J	U	0.519
4-MoCB	3	—	6.53	B J	U	0.519
2,2'-DiCB	4	—	—	U	—	3.58
2,3-DiCB	5	—	—	U	—	3.27
2,3'-DiCB	6	—	—	U	—	2.97
2,4-DiCB	7	—	—	U	—	3.08
2,4'-DiCB	8	—	—	U	—	2.8
2,5-DiCB	9	—	—	U	—	2.95
2,6-DiCB	10	—	—	U	—	3.03
3,3'-DiCB	11	—	8.49	B J	—	3.19
3,4-DiCB	12	12 + 13	—	C U	—	3.22
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	3.09
4,4'-DiCB	15	—	3.97	B J	U	3.62
2,2',3-TriCB	16	—	0.866	J	—	0.677
2,2',4-TriCB	17	—	4.23	J	—	0.563
2,2',5-TriCB	18	18 + 30	1.73	C B J	—	0.519
2,2',6-TriCB	19	—	—	U	—	0.519
2,3,3'-TriCB	20	20 + 28	3.33	C B J	U	0.519
2,3,4-TriCB	21	21 + 33	6.18	C B J	—	0.519
2,3,4'-TriCB	22	—	0.640	K B J	U	0.519
2,3,5-TriCB	23	—	—	U	—	0.519
2,3,6-TriCB	24	—	—	U	—	0.519
2,3',4-TriCB	25	—	1.14	K J	U	0.519
2,3',5-TriCB	26	26 + 29	—	C U	—	0.519
2,3',6-TriCB	27	—	—	U	—	0.519
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	1.70	B J	U	0.519
2,4',6-TriCB	32	—	0.557	J	—	0.519
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.519
3,3',4-TriCB	35	—	—	U	—	0.519
3,3',5-TriCB	36	—	—	U	—	0.519
3,4,4'-TriCB	37	—	—	U	—	0.519
3,4,5-TriCB	38	—	—	U	—	0.519
3,4',5-TriCB	39	—	—	U	—	0.519
2,2',3,3'-TeCB	40	40 + 41 + 71	1.41	C K J	U	0.919
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.988	K J	U	0.95
2,2',3,5-TeCB	43	—	—	U	—	1.12
2,2',3,5'-TeCB	44	44 + 47 + 65	351	C B	R1	0.846
2,2',3,6-TeCB	45	45 + 51	157	C	R1	0.903
2,2',3,6'-TeCB	46	—	—	U	—	1.03
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-1		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.905
2,2',4,5'-TeCB	49	49 + 69	8.19	C B J	—	0.78
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.881
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	3.75	K B J	U	0.846
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.519
2,3,3',4-TeCB	55	—	—	U	—	1.52
2,3,3',4'-TeCB	56	—	—	U	—	1.52
2,3,3',5-TeCB	57	—	—	U	—	1.44
2,3,3',5'-TeCB	58	—	—	U	—	1.46
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.711
2,3,4,4'-TeCB	60	—	—	U	—	1.53
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	3.53	C B J	—	1.45
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.38
2,3,4',6-TeCB	64	—	0.844	K B J	U	0.683
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.58	B J	U	1.39
2,3',4,5-TeCB	67	—	—	U	—	1.29
2,3',4,5'-TeCB	68	—	227	—	R1	1.38
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.4
2,3',5',6-TeCB	73	—	—	U	—	0.685
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.66
3,3',4,5-TeCB	78	—	—	U	—	1.46
3,3',4,5'-TeCB	79	—	—	U	—	1.27
3,3',5,5'-TeCB	80	—	—	U	—	1.36
3,4,4',5-TeCB	81	—	—	U	—	1.57
2,2',3,3',4-PeCB	82	—	—	U	—	0.519
2,2',3,3',5-PeCB	83	83 + 99	5.31	C B J	—	0.519
2,2',3,3',6-PeCB	84	—	1.34	J	—	0.519
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.26	C J	—	0.519
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	4.24	C K B J	U	0.519
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.71	C K J	U	0.519
2,2',3,4,6'-PeCB	89	—	—	U	—	0.519
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.07	C B J	U	0.519
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	0.989	J	—	0.519
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.10	C B J	U	0.519
2,2',3,5,6'-PeCB	94	—	—	U	—	0.519

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-1		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.519
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.519
2,2',4,6,6'-PeCB	104	—	—	U	—	0.519
2,3,3',4,4'-PeCB	105	—	2.04	B J	—	0.519
2,3,3',4,5-PeCB	106	—	—	U	—	0.519
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.519
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.519
2,3,3',4',6-PeCB	110	110 + 115	5.91	C B J	—	0.519
2,3,3',5,5'-PeCB	111	—	—	U	—	0.519
2,3,3',5,6-PeCB	112	—	—	U	—	0.519
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.519
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.51	B J	U	0.519
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.519
2,3',4,5',6-PeCB	121	—	—	U	—	0.519
2',3,3',4,5-PeCB	122	—	—	U	—	0.519
2',3,4,4',5-PeCB	123	—	—	U	—	0.519
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.519
3,3',4,5,5'-PeCB	127	—	—	U	—	0.519
2,2',3,3',4,4'-HxCB	128	128 + 166	1.07	C J	—	0.519
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.75	C B J	—	0.519
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.519
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.519
2,2',3,3',4,6'-HxCB	132	—	2.32	J	—	0.519
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.519
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.519
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.13	C B J	—	0.519
2,2',3,3',6,6'-HxCB	136	—	0.703	K J	U	0.519
2,2',3,4,4',5-HxCB	137	—	0.641	K J	U	0.519
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.519
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.976	K J	U	0.519

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-1		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.519
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.519
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.519
2,2',3,4',5,5'-HxCB	146	—	1.11	K J	U	0.519
2,2',3,4',5,6-HxCB	147	147 + 149	4.83	C B J	—	0.519
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.519
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.519
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.519
2,2',4,4',5,5'-HxCB	153	153 + 168	6.20	C K B J	U	0.519
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.519
2,3,3',4,4',5-HxCB	156	156 + 157	1.30	C J	—	0.519
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.750	J	—	0.519
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.519
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.519
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.519
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.668	K J	U	0.519
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.519
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.519
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.519
2,2',3,3',4,4',5-HpCB	170	—	0.939	K J	U	0.519
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.530	C K J	U	0.519
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.519
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.01	K J	U	0.519
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.519
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.519
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.519
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.519
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.519
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.82	C J	—	0.519
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.519
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.519
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.850	C K J	U	0.519
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.519
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.519
2,2',3,4',5,5',6-HpCB	187	—	1.93	B J	U	0.519
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.519

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-1		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.519
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.519
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.519
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.519
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.810	K J	U	0.519
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.519
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.519
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.519
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.10	C K J	U	0.519
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.519
2,2',3,3',5,5',6,6'-OcCB	202	—	0.716	K J	U	0.519
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.519
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.519
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.519
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	4.63
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	3.4
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	3.35
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.67	B J	—	0.519
Total PCBs	—	—	74.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-1		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.69	B J	U	0.515
3-MoCB	2	—	2.19	B J	U	0.515
4-MoCB	3	—	3.29	B J	U	0.515
2,2'-DiCB	4	—	0.878	K J	U	0.709
2,3-DiCB	5	—	—	U	—	0.637
2,3'-DiCB	6	—	0.668	J	—	0.553
2,4-DiCB	7	—	0.891	J	—	0.557
2,4'-DiCB	8	—	2.33	B J	U	0.515
2,5-DiCB	9	—	—	U	—	0.556
2,6-DiCB	10	—	—	U	—	0.538
3,3'-DiCB	11	—	12.9	B J	U	0.64
3,4-DiCB	12	12 + 13	—	C U	—	0.652
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.583
4,4'-DiCB	15	—	1.84	B J	U	0.717
2,2',3-TriCB	16	—	0.666	B J	—	0.515
2,2',4-TriCB	17	—	2.57	J	—	0.515
2,2',5-TriCB	18	18 + 30	1.76	C B J	—	0.515
2,2',6-TriCB	19	—	—	U	—	0.515
2,3,3'-TriCB	20	20 + 28	4.79	C B J	U	0.515
2,3,4-TriCB	21	21 + 33	3.12	C B J	—	0.515
2,3,4'-TriCB	22	—	1.20	B J	U	0.515
2,3,5-TriCB	23	—	—	U	—	0.515
2,3,6-TriCB	24	—	—	U	—	0.515
2,3',4-TriCB	25	—	0.912	J	—	0.515
2,3',5-TriCB	26	26 + 29	0.559	C J	—	0.515
2,3',6-TriCB	27	—	—	U	—	0.515
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.65	B J	U	0.515
2,4',6-TriCB	32	—	0.542	J	—	0.515
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.515
3,3',4-TriCB	35	—	—	U	—	0.515
3,3',5-TriCB	36	—	—	U	—	0.515
3,4,4'-TriCB	37	—	1.34	B J	—	0.515
3,4,5-TriCB	38	—	—	U	—	0.515
3,4',5-TriCB	39	—	—	U	—	0.515
2,2',3,3'-TeCB	40	40 + 41 + 71	1.87	C B J	U	0.515
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.39	J	—	0.515
2,2',3,5-TeCB	43	—	—	U	—	0.515
2,2',3,5'-TeCB	44	44 + 47 + 65	235	C B	R1	0.515
2,2',3,6-TeCB	45	45 + 51	48.4	C	R1	0.515
2,2',3,6'-TeCB	46	—	—	U	—	0.515
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-1		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.641	K J	U	0.515
2,2',4,5'-TeCB	49	49 + 69	4.87	C B J	—	0.515
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.515
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.46	K B J	U	0.515
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.515
2,3,3',4-TeCB	55	—	—	U	—	0.515
2,3,3',4'-TeCB	56	—	1.52	B J	U	0.515
2,3,3',5-TeCB	57	—	—	U	—	0.515
2,3,3',5'-TeCB	58	—	—	U	—	0.515
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.515
2,3,4,4'-TeCB	60	—	1.01	J	—	0.515
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	10.2	C B J	U	0.515
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.515
2,3,4',6-TeCB	64	—	1.88	K B J	U	0.515
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.40	B J	U	0.515
2,3',4,5-TeCB	67	—	—	U	—	0.515
2,3',4,5'-TeCB	68	—	215	—	R1	0.515
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.515
2,3',5',6-TeCB	73	—	—	U	—	0.515
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.762	K B J	U	0.515
3,3',4,5-TeCB	78	—	—	U	—	0.515
3,3',4,5'-TeCB	79	—	—	U	—	0.515
3,3',5,5'-TeCB	80	—	—	U	—	0.515
3,4,4',5-TeCB	81	—	—	U	—	0.515
2,2',3,3',4-PeCB	82	—	1.41	K J	U	0.806
2,2',3,3',5-PeCB	83	83 + 99	9.84	C B J	U	0.741
2,2',3,3',6-PeCB	84	—	3.72	K B J	U	0.868
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.98	C B J	U	0.598
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	10.7	C B J	U	0.626
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.92	C B J	U	0.739
2,2',3,4,6'-PeCB	89	—	—	U	—	0.784
2,2',3,4',5-PeCB	90	90 + 101 + 113	15.2	C B J	U	0.642
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.48	B J	U	0.765
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	11.8	C B J	U	0.715
2,2',3,5,6'-PeCB	94	—	—	U	—	0.795

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-1		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.515
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.642
2,2',4,6,6'-PeCB	104	—	—	U	—	0.515
2,3,3',4,4'-PeCB	105	—	5.27	B J	U	0.515
2,3,3',4,5-PeCB	106	—	—	U	—	0.515
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.515
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.15	B J	—	0.515
2,3,3',4',6-PeCB	110	110 + 115	16.5	C B J	U	0.531
2,3,3',5,5'-PeCB	111	—	—	U	—	0.528
2,3,3',5,6-PeCB	112	—	—	U	—	0.537
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.515
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	14.0	B J	U	0.515
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.515
2,3',4,5',6-PeCB	121	—	—	U	—	0.553
2',3,3',4,5-PeCB	122	—	—	U	—	0.515
2',3,4,4',5-PeCB	123	—	—	U	—	0.515
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.535
3,3',4,5,5'-PeCB	127	—	—	U	—	0.515
2,2',3,3',4,4'-HxCB	128	128 + 166	2.25	C K B J	U	0.515
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	11.2	C B J	U	0.515
2,2',3,3',4,5'-HxCB	130	—	0.591	J	—	0.591
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.71
2,2',3,3',4,6'-HxCB	132	—	3.35	K B J	U	0.71
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.62
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.703
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.13	C B J	U	0.626
2,2',3,3',6,6'-HxCB	136	—	1.26	B J	—	0.515
2,2',3,4,4',5-HxCB	137	—	0.837	K J	U	0.556
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.628
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.42	J	—	0.535

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-1		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.682
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.634
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.536
2,2',3,4',5,5'-HxCB	146	—	1.82	K J	U	0.533
2,2',3,4',5,6-HxCB	147	147 + 149	8.09	C B J	—	0.637
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.677
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.52
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.515
2,2',4,4',5,5'-HxCB	153	153 + 168	9.03	C B J	U	0.515
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.515
2,3,3',4,4',5-HxCB	156	156 + 157	1.94	C J	—	0.606
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.24	K J	U	0.515
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.515
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.515
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.515
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.676	J	—	0.515
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.515
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.823	J	—	0.515
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.515
2,2',3,3',4,4',5-HpCB	170	—	1.31	B J	—	0.57
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.535
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.546
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.955	B J	—	0.515
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.515
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.515
2,2',3,3',4',5,6-HpCB	177	—	0.914	K J	U	0.516
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.515
2,2',3,3',5,6,6'-HpCB	179	—	0.777	K J	U	0.515
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.91	C K B J	U	0.515
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.515
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.515
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.515
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.515
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.515
2,2',3,4',5,5',6-HpCB	187	—	2.40	B J	U	0.515
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.515

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-1		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.515
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.515
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.515
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.515
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.601	J	—	0.515
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.515
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.515
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.515
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.24	C K B J	U	0.524
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.515
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.515
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.515
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.515
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.515
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	0.894
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.671
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.692
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	0.952	K B J	U	0.515
Total PCBs	—	—	39.1	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-1		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.70	B J	U	0.527
3-MoCB	2	—	1.78	B J	U	0.527
4-MoCB	3	—	3.20	B J	U	0.527
2,2'-DiCB	4	—	1.17	K J	U	1.03
2,3-DiCB	5	—	—	U	—	0.969
2,3'-DiCB	6	—	—	U	—	0.837
2,4-DiCB	7	—	0.919	K J	U	0.827
2,4'-DiCB	8	—	2.56	B J	U	0.753
2,5-DiCB	9	—	—	U	—	0.829
2,6-DiCB	10	—	—	U	—	0.809
3,3'-DiCB	11	—	14.0	B J	U	0.901
3,4-DiCB	12	12 + 13	—	C U	—	0.919
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.879
4,4'-DiCB	15	—	2.28	K B J	U	1.06
2,2',3-TriCB	16	—	0.950	B J	—	0.527
2,2',4-TriCB	17	—	2.04	J	—	0.527
2,2',5-TriCB	18	18 + 30	1.52	C K B J	U	0.527
2,2',6-TriCB	19	—	—	U	—	0.527
2,3,3'-TriCB	20	20 + 28	4.21	C B J	U	0.527
2,3,4-TriCB	21	21 + 33	2.58	C B J	—	0.527
2,3,4'-TriCB	22	—	1.30	K B J	U	0.527
2,3,5-TriCB	23	—	—	U	—	0.527
2,3,6-TriCB	24	—	—	U	—	0.527
2,3',4-TriCB	25	—	0.628	J	—	0.527
2,3',5-TriCB	26	26 + 29	0.654	C J	—	0.527
2,3',6-TriCB	27	—	—	U	—	0.527
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.69	B J	U	0.527
2,4',6-TriCB	32	—	0.549	J	—	0.527
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.527
3,3',4-TriCB	35	—	—	U	—	0.527
3,3',5-TriCB	36	—	—	U	—	0.527
3,4,4'-TriCB	37	—	1.15	B J	—	0.527
3,4,5-TriCB	38	—	—	U	—	0.527
3,4',5-TriCB	39	—	—	U	—	0.527
2,2',3,3'-TeCB	40	40 + 41 + 71	1.87	C B J	U	0.527
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.864	K J	U	0.527
2,2',3,5-TeCB	43	—	—	U	—	0.527
2,2',3,5'-TeCB	44	44 + 47 + 65	110	C B	R1	0.527
2,2',3,6-TeCB	45	45 + 51	25.0	C	R1	0.527
2,2',3,6'-TeCB	46	—	—	U	—	0.527
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-1		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.549	J	—	0.527
2,2',4,5'-TeCB	49	49 + 69	3.16	C B J	—	0.527
2,2',4,6-TeCB	50	50 + 53	0.552	C J	—	0.527
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.07	B J	—	0.527
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.527
2,3,3',4-TeCB	55	—	—	U	—	0.708
2,3,3',4'-TeCB	56	—	1.55	B J	U	0.72
2,3,3',5-TeCB	57	—	—	U	—	0.688
2,3,3',5'-TeCB	58	—	—	U	—	0.68
2,3,3',6-TeCB	59	59 + 62 + 75	0.673	C K J	U	0.527
2,3,4,4'-TeCB	60	—	1.23	J	—	0.711
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	11.1	C B J	U	0.668
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.662
2,3,4',6-TeCB	64	—	1.96	B J	U	0.527
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.29	B J	U	0.662
2,3',4,5-TeCB	67	—	—	U	—	0.607
2,3',4,5'-TeCB	68	—	160	—	R1	0.688
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.68
2,3',5',6-TeCB	73	—	—	U	—	0.527
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.887	B J	—	0.572
3,3',4,5-TeCB	78	—	—	U	—	0.688
3,3',4,5'-TeCB	79	—	—	U	—	0.575
3,3',5,5'-TeCB	80	—	—	U	—	0.63
3,4,4',5-TeCB	81	—	—	U	—	0.671
2,2',3,3',4-PeCB	82	—	1.37	J	—	0.775
2,2',3,3',5-PeCB	83	83 + 99	10.6	C B J	U	0.69
2,2',3,3',6-PeCB	84	—	3.87	B J	U	0.814
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.50	C B J	U	0.562
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	11.7	C B J	U	0.59
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.71	C B J	U	0.685
2,2',3,4,6'-PeCB	89	—	—	U	—	0.738
2,2',3,4',5-PeCB	90	90 + 101 + 113	18.2	C B J	U	0.605
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.20	K B J	U	0.697
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	12.0	C B J	U	0.67
2,2',3,5,6'-PeCB	94	—	—	U	—	0.779

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-1		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.527
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.63
2,2',4,6,6'-PeCB	104	—	—	U	—	0.527
2,3,3',4,4'-PeCB	105	—	5.67	B J	U	0.527
2,3,3',4,5-PeCB	106	—	—	U	—	0.527
2,3,3',4',5-PeCB	107	107 + 124	0.788	C K J	U	0.529
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.01	B J	—	0.527
2,3,3',4',6-PeCB	110	110 + 115	18.6	C B J	U	0.527
2,3,3',5,5'-PeCB	111	—	—	U	—	0.527
2,3,3',5,6-PeCB	112	—	—	U	—	0.527
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.527
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	15.1	B J	U	0.527
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.527
2,3',4,5',6-PeCB	121	—	—	U	—	0.527
2',3,3',4,5-PeCB	122	—	—	U	—	0.539
2',3,4,4',5-PeCB	123	—	—	U	—	0.527
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.545
3,3',4,5,5'-PeCB	127	—	—	U	—	0.527
2,2',3,3',4,4'-HxCB	128	128 + 166	2.66	C B J	U	0.57
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	12.7	C B J	U	0.555
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.696
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.775
2,2',3,3',4,6'-HxCB	132	—	4.13	B J	U	0.806
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.721
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.813
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.14	C K B J	U	0.691
2,2',3,3',6,6'-HxCB	136	—	1.08	B J	—	0.543
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.646
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.701
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.60	K J	U	0.611

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-1		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.763
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.672
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.581
2,2',3,4',5,5'-HxCB	146	—	1.82	J	—	0.595
2,2',3,4',5,6-HxCB	147	147 + 149	9.29	C B J	—	0.738
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.723
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.549
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.535
2,2',4,4',5,5'-HxCB	153	153 + 168	10.5	C B J	U	0.527
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.527
2,3,3',4,4',5-HxCB	156	156 + 157	2.05	C J	—	0.685
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.03	K J	U	0.527
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.527
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.527
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.527
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.761	J	—	0.527
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.55
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.532	K J	U	0.527
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.527
2,2',3,3',4,4',5-HpCB	170	—	1.61	B J	—	0.568
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.644	C K J	U	0.537
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.545
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.38	K B J	U	0.527
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.527
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.527
2,2',3,3',4',5,6-HpCB	177	—	0.879	K J	U	0.527
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.527
2,2',3,3',5,6,6'-HpCB	179	—	0.547	K J	U	0.527
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.53	C K B J	U	0.527
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.527
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.527
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.793	C K J	U	0.527
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.527
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.527
2,2',3,4',5,5',6-HpCB	187	—	2.69	K B J	U	0.527
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.527

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-1		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.527
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.527
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.527
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.527
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.28	K J	U	0.527
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.542
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.527
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.527
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.42	C B J	—	0.527
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.527
2,2',3,3',5,5',6,6'-OcCB	202	—	0.671	K J	U	0.527
2,2',3,4,4',5,5',6-OcCB	203	—	1.53	K J	U	0.527
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.527
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.527
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.61	K J	U	0.801
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.597
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.611
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.92	B J	—	0.527
Total PCBs	—	—	44.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L56994-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.41	B J	U	0.323
3-MoCB	2	—	1.18	B J	U	0.389
4-MoCB	3	—	2.14	K B J	U	0.404
2,2'-DiCB	4	—	—	U	—	1.97
2,3-DiCB	5	—	—	U	—	1.61
2,3'-DiCB	6	—	—	U	—	1.45
2,4-DiCB	7	—	—	U	—	1.48
2,4'-DiCB	8	—	1.50	K J	U	1.35
2,5-DiCB	9	—	1.89	K B J	U	1.42
2,6-DiCB	10	—	—	U	—	1.46
3,3'-DiCB	11	—	10.4	B	—	1.65
3,4-DiCB	12	12 + 13	—	C U	—	1.6
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.51
4,4'-DiCB	15	—	—	U	—	1.72
2,2',3-TriCB	16	—	—	U	—	1
2,2',4-TriCB	17	—	3.84	J	—	0.843
2,2',5-TriCB	18	18 + 30	1.91	C K B J	U	0.698
2,2',6-TriCB	19	—	—	U	—	0.852
2,3,3'-TriCB	20	20 + 28	5.77	C B	U	0.573
2,3,4-TriCB	21	21 + 33	3.06	C B J	—	0.535
2,3,4'-TriCB	22	—	1.21	B J	U	0.622
2,3,5-TriCB	23	—	—	U	—	0.586
2,3,6-TriCB	24	—	—	U	—	0.626
2,3',4-TriCB	25	—	1.26	K J	U	0.474
2,3',5-TriCB	26	26 + 29	0.573	C K B J	U	0.567
2,3',6-TriCB	27	—	—	U	—	0.568
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.84	K B J	U	0.533
2,4',6-TriCB	32	—	—	U	—	0.523
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.59
3,3',4-TriCB	35	—	—	U	—	0.651
3,3',5-TriCB	36	—	—	U	—	0.578
3,4,4'-TriCB	37	—	0.945	K B J	U	0.61
3,4,5-TriCB	38	—	—	U	—	0.57
3,4',5-TriCB	39	—	—	U	—	0.569
2,2',3,3'-TeCB	40	40 + 41 + 71	—	C U	—	0.952
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.988
2,2',3,5-TeCB	43	—	—	U	—	1.14
2,2',3,5'-TeCB	44	44 + 47 + 65	69.0	C B	R1	0.857
2,2',3,6-TeCB	45	45 + 51	32.6	C	R1	0.924
2,2',3,6'-TeCB	46	—	—	U	—	1.09
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L56994-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.955
2,2',4,5'-TeCB	49	49 + 69	4.71	C B	—	0.792
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.889
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	5.46	K B	U	0.884
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.616
2,3,3',4-TeCB	55	—	—	U	—	0.937
2,3,3',4'-TeCB	56	—	1.62	B J	U	0.934
2,3,3',5-TeCB	57	—	—	U	—	0.857
2,3,3',5'-TeCB	58	—	—	U	—	0.875
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.692
2,3,4,4'-TeCB	60	—	1.31	K B J	U	0.927
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	7.88	C B	—	0.854
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.829
2,3,4',6-TeCB	64	—	1.30	B J	—	0.669
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.75	B J	—	0.857
2,3',4,5-TeCB	67	—	—	U	—	0.755
2,3',4,5'-TeCB	68	—	64.4	—	R1	0.814
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.807
2,3',5',6-TeCB	73	—	—	U	—	0.692
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.985	K B J	U	0.868
3,3',4,5-TeCB	78	—	—	U	—	0.917
3,3',4,5'-TeCB	79	—	—	U	—	0.728
3,3',5,5'-TeCB	80	—	—	U	—	0.805
3,4,4',5-TeCB	81	—	—	U	—	0.879
2,2',3,3',4-PeCB	82	—	—	U	—	1.38
2,2',3,3',5-PeCB	83	83 + 99	10.0	C B	—	1.2
2,2',3,3',6-PeCB	84	—	2.68	J	—	1.38
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.25	C K J	U	1.01
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	8.58	C B	U	1.03
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	—	C U	—	1.19
2,2',3,4,6'-PeCB	89	—	—	U	—	1.25
2,2',3,4',5-PeCB	90	90 + 101 + 113	15.2	C B	—	1.01
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.73	B J	—	1.15
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	8.50	C B	—	1.14
2,2',3,5,6'-PeCB	94	—	—	U	—	1.28

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L56994-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.898
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.02
2,2',4,6,6'-PeCB	104	—	—	U	—	0.847
2,3,3',4,4'-PeCB	105	—	6.93	K B	U	0.978
2,3,3',4,5-PeCB	106	—	—	U	—	0.931
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.986
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.04	K J	U	0.977
2,3,3',4',6-PeCB	110	110 + 115	13.7	C B	U	0.892
2,3,3',5,5'-PeCB	111	—	—	U	—	0.911
2,3,3',5,6-PeCB	112	—	—	U	—	0.889
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.897
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	14.6	B	—	0.885
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.851
2,3',4,5',6-PeCB	121	—	—	U	—	0.879
2',3,3',4,5-PeCB	122	—	—	U	—	1.05
2',3,4,4',5-PeCB	123	—	—	U	—	0.961
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	1.02
3,3',4,5,5'-PeCB	127	—	—	U	—	0.987
2,2',3,3',4,4'-HxCB	128	128 + 166	3.44	C K J	U	1.38
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	24.8	C B	—	1.37
2,2',3,3',4,5'-HxCB	130	—	—	U	—	1.78
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.66
2,2',3,3',4,6'-HxCB	132	—	4.44	—	—	1.69
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.63
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.64
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.07	C B G	U	1.32
2,2',3,3',6,6'-HxCB	136	—	1.49	K J	U	0.959
2,2',3,4,4',5-HxCB	137	—	—	U	—	1.55
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.46
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.04	J	—	1.52

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L56994-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.62
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.34
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1.03
2,2',3,4',5,5'-HxCB	146	—	2.72	K J G	U	1.42
2,2',3,4',5,6-HxCB	147	147 + 149	11.3	C	—	1.45
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.36
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.955
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.894
2,2',4,4',5,5'-HxCB	153	153 + 168	25.4	C B	—	1.23
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.751
2,3,3',4,4',5-HxCB	156	156 + 157	2.69	C J	—	1.33
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.03	K J	U	1.04
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.13
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	1.13
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.13
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.70	J	—	1.19
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.28
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	1.02
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.06
2,2',3,3',4,4',5-HpCB	170	—	4.35	—	—	1.73
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	1.67
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.7
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.71	J	—	1.51
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.44
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	1.08
2,2',3,3',4',5,6-HpCB	177	—	2.27	J	—	1.56
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	1.51
2,2',3,3',5,6,6'-HpCB	179	—	1.55	K J	U	1.06
2,2',3,4,4',5,5'-HpCB	180	180 + 193	10.8	C B	—	1.37
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.56
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.48
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.65	C J	—	1.49
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	1.07
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	1.15
2,2',3,4',5,5',6-HpCB	187	—	7.10	—	—	1.42
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.996

Table B2-4. PCB Congener AXYS Analytical Data for Newaukum Creek (0322) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L56994-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.835
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	1.21
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	1.19
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.31
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.13	J	—	1.41
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	1.51
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	1.94
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.33
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.44	C K	U	1.92
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.34
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	1.39
2,2',3,4,4',5,5',6-OcCB	203	—	3.10	J	—	1.78
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.32
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	1.04
2,2',3,3',4,4',5,5',6-NoCB	206	—	2.72	J	—	2.06
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.59
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.62
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	3.64	B J	—	1.48
Total PCBs	—	—	205	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-2		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	22.9	B	—	0.564
3-MoCB	2	—	1.04	B J	U	0.564
4-MoCB	3	—	40.2	B	—	0.564
2,2'-DiCB	4	—	31.1	—	—	1.6
2,3-DiCB	5	—	—	U	—	1.52
2,3'-DiCB	6	—	—	U	—	1.3
2,4-DiCB	7	—	3.49	B J	U	1.31
2,4'-DiCB	8	—	38.9	B	—	1.16
2,5-DiCB	9	—	—	U	—	1.3
2,6-DiCB	10	—	—	U	—	1.29
3,3'-DiCB	11	—	20.0	B J	U	1.42
3,4-DiCB	12	12 + 13	—	C U	—	1.4
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.38
4,4'-DiCB	15	—	60.5	B	—	1.42
2,2',3-TriCB	16	—	2.08	B J	U	0.564
2,2',4-TriCB	17	—	2.67	B J	U	0.564
2,2',5-TriCB	18	18 + 30	42.9	C B	—	0.564
2,2',6-TriCB	19	—	48.0	—	—	0.564
2,3,3'-TriCB	20	20 + 28	72.1	C B	—	0.564
2,3,4-TriCB	21	21 + 33	3.17	C B J	U	0.564
2,3,4'-TriCB	22	—	2.54	B J	U	0.564
2,3,5-TriCB	23	—	61.5	—	—	0.564
2,3,6-TriCB	24	—	—	U	—	0.564
2,3',4-TriCB	25	—	0.583	J	—	0.564
2,3',5-TriCB	26	26 + 29	1.10	C J	—	0.564
2,3',6-TriCB	27	—	—	U	—	0.564
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	56.5	B	—	0.564
2,4',6-TriCB	32	—	1.38	B J	U	0.564
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	59.2	—	—	0.564
3,3',4-TriCB	35	—	0.994	K J	U	0.574
3,3',5-TriCB	36	—	—	U	—	0.564
3,4,4'-TriCB	37	—	75.2	B	—	0.564
3,4,5-TriCB	38	—	—	U	—	0.564
3,4',5-TriCB	39	—	—	U	—	0.564
2,2',3,3'-TeCB	40	40 + 41 + 71	51.1	C B	—	0.564
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.927	K B J	U	0.564
2,2',3,5-TeCB	43	—	—	U	—	0.564
2,2',3,5'-TeCB	44	44 + 47 + 65	79.3	C B	R1	0.564
2,2',3,6-TeCB	45	45 + 51	13.2	C B J	R1	0.564
2,2',3,6'-TeCB	46	—	—	U	—	0.564
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-2		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.748	K B J	U	0.564
2,2',4,5'-TeCB	49	49 + 69	61.1	C B	—	0.564
2,2',4,6-TeCB	50	50 + 53	0.772	C K B J	U	0.564
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	69.5	B	—	0.564
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	52.0	—	—	0.564
2,3,3',4-TeCB	55	—	—	U	—	0.653
2,3,3',4'-TeCB	56	—	87.3	B	—	0.646
2,3,3',5-TeCB	57	—	—	U	—	0.686
2,3,3',5'-TeCB	58	—	—	U	—	0.679
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.564
2,3,4,4'-TeCB	60	—	1.83	B J	U	0.636
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.75	C B J	U	0.646
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.634
2,3,4',6-TeCB	64	—	1.91	B J	—	0.564
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	91.3	B	—	0.629
2,3',4,5-TeCB	67	—	—	U	—	0.598
2,3',4,5'-TeCB	68	—	32.8	—	R1	0.671
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.651
2,3',5',6-TeCB	73	—	—	U	—	0.564
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	94.6	B	—	0.565
3,3',4,5-TeCB	78	—	—	U	—	0.657
3,3',4,5'-TeCB	79	—	—	U	—	0.564
3,3',5,5'-TeCB	80	—	—	U	—	0.574
3,4,4',5-TeCB	81	—	100	—	—	0.568
2,2',3,3',4-PeCB	82	—	1.23	B J	—	0.564
2,2',3,3',5-PeCB	83	83 + 99	123	C B	—	0.564
2,2',3,3',6-PeCB	84	—	2.67	B J	U	0.564
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.94	C K B J	U	0.564
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	77.2	C B	—	0.564
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.65	C K B J	U	0.564
2,2',3,4,6'-PeCB	89	—	—	U	—	0.564
2,2',3,4',5-PeCB	90	90 + 101 + 113	104	C B	—	0.564
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	4.44	B J	—	0.564
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	68.0	C B	—	0.564
2,2',3,5,6'-PeCB	94	—	—	U	—	0.564

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-2		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.564
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.564
2,2',4,6,6'-PeCB	104	—	66.9	—	—	0.564
2,3,3',4,4'-PeCB	105	—	98.6	B	—	0.576
2,3,3',4,5-PeCB	106	—	—	U	—	0.634
2,3,3',4',5-PeCB	107	107 + 124	0.931	C J	—	0.721
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.653
2,3,3',4',6-PeCB	110	110 + 115	98.2	C B	—	0.564
2,3,3',5,5'-PeCB	111	—	—	U	—	0.564
2,3,3',5,6-PeCB	112	—	—	U	—	0.564
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	110	—	—	0.626
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	106	B	—	0.564
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.564
2,3',4,5',6-PeCB	121	—	—	U	—	0.564
2',3,3',4,5-PeCB	122	—	—	U	—	0.73
2',3,4,4',5-PeCB	123	—	110	—	—	0.657
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	119	—	—	0.674
3,3',4,5,5'-PeCB	127	—	—	U	—	0.691
2,2',3,3',4,4'-HxCB	128	128 + 166	2.33	C J	—	0.564
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	111	C B	—	0.564
2,2',3,3',4,5'-HxCB	130	—	1.08	K B J	U	0.564
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.564
2,2',3,3',4,6'-HxCB	132	—	4.34	K J	U	0.564
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.564
2,2',3,3',5,6-HxCB	134	134 + 143	0.966	C K J	U	0.564
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	83.5	C	—	0.564
2,2',3,3',6,6'-HxCB	136	—	1.47	J	—	0.564
2,2',3,4,4',5-HxCB	137	—	0.660	J	—	0.564
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.564
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.54	J	—	0.564

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-2		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.564
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.564
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.564
2,2',3,4',5,5'-HxCB	146	—	5.11	J	—	0.564
2,2',3,4',5,6-HxCB	147	147 + 149	93.2	C B	—	0.564
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.564
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.564
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.564
2,2',4,4',5,5'-HxCB	153	153 + 168	126	C B	—	0.564
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	87.0	—	—	0.564
2,3,3',4,4',5-HxCB	156	156 + 157	251	C B	—	0.564
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.77	K J	U	0.564
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.564
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.564
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.564
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.883	K J	U	0.564
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.564
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	143	—	—	0.564
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	137	—	—	0.564
2,2',3,3',4,4',5-HpCB	170	—	98.9	B	—	0.564
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.769	C J	—	0.564
2,2',3,3',4,5,5'-HpCB	172	—	0.725	J	—	0.564
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.56	B J	—	0.564
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.564
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.564
2,2',3,3',4',5,6-HpCB	177	—	1.14	K J	U	0.564
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.564
2,2',3,3',5,6,6'-HpCB	179	—	1.82	J	—	0.564
2,2',3,4,4',5,5'-HpCB	180	180 + 193	117	C B	—	0.564
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.564
2,2',3,4,4',5,6'-HpCB	182	—	110	—	—	0.564
2,2',3,4,4',5',6-HpCB	183	183 + 185	113	C B	—	0.564
2,2',3,4,4',6,6'-HpCB	184	—	1.58	J	—	0.564
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.564
2,2',3,4',5,5',6-HpCB	187	—	123	B	—	0.564
2,2',3,4',5,6,6'-HpCB	188	—	79.7	—	—	0.564

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-2		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	120	—	—	0.564
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.564
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.564
2,3,3',4,5,5',6-HpCB	192	—	0.948	K J	U	0.564
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	95.3	B	—	0.564
2,2',3,3',4,4',5,6-OcCB	195	—	0.878	J	—	0.564
2,2',3,3',4,4',5,6'-OcCB	196	—	81.3	—	—	0.564
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.564
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.51	C K B J	U	0.564
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.564
2,2',3,3',5,5',6,6'-OcCB	202	—	63.9	—	—	0.564
2,2',3,4,4',5,5',6-OcCB	203	—	1.22	B J	—	0.564
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.564
2,3,3',4,4',5,5',6-OcCB	205	—	106	—	—	0.564
2,2',3,3',4,4',5,5',6-NoCB	206	—	74.6	—	—	0.962
2,2',3,3',4,4',5,6,6'-NoCB	207	—	0.951	K J	U	0.879
2,2',3,3',4,5,5',6,6'-NoCB	208	—	74.5	—	—	0.838
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	59.1	B	—	0.564
Total PCBs	—	—	4680	—	J	—

B = Detected in method blank

J = Estimated value

U = Not detected

C = Coelution

C# = Coelution with #, concentration listed under #

K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration

Lab Qual = Lab Qualifier

Val Qual= Validation Qualifier

SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-2		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.74	B J	U	0.55
3-MoCB	2	—	1.00	B J	U	0.55
4-MoCB	3	—	2.53	K B J	U	0.55
2,2'-DiCB	4	—	2.73	J	—	1.92
2,3-DiCB	5	—	—	U	—	1.73
2,3'-DiCB	6	—	—	U	—	1.56
2,4-DiCB	7	—	—	U	—	1.58
2,4'-DiCB	8	—	4.13	B J	U	1.43
2,5-DiCB	9	—	—	U	—	1.52
2,6-DiCB	10	—	—	U	—	1.5
3,3'-DiCB	11	—	14.00	B J	U	1.64
3,4-DiCB	12	12 + 13	—	C U	—	1.67
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.6
4,4'-DiCB	15	—	2.55	B J	U	1.59
2,2',3-TriCB	16	—	2.19	K B J	U	0.55
2,2',4-TriCB	17	—	2.76	K B J	U	0.55
2,2',5-TriCB	18	18 + 30	5.45	C B J	U	0.55
2,2',6-TriCB	19	—	0.894	J	—	0.55
2,3,3'-TriCB	20	20 + 28	6.51	C B J	U	0.55
2,3,4-TriCB	21	21 + 33	2.28	C B J	U	0.55
2,3,4'-TriCB	22	—	2.47	B J	U	0.55
2,3,5-TriCB	23	—	—	U	—	0.55
2,3,6-TriCB	24	—	—	U	—	0.55
2,3',4-TriCB	25	—	0.603	J	—	0.55
2,3',5-TriCB	26	26 + 29	1.03	C J	—	0.55
2,3',6-TriCB	27	—	—	U	—	0.55
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.96	B J	U	0.55
2,4',6-TriCB	32	—	1.44	B J	U	0.55
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.55
3,3',4-TriCB	35	—	—	U	—	0.55
3,3',5-TriCB	36	—	—	U	—	0.55
3,4,4'-TriCB	37	—	1.26	B J	U	0.55
3,4,5-TriCB	38	—	—	U	—	0.55
3,4',5-TriCB	39	—	—	U	—	0.55
2,2',3,3'-TeCB	40	40 + 41 + 71	2.11	C B J	U	0.55
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.885	B J	—	0.55
2,2',3,5-TeCB	43	—	—	U	—	0.55
2,2',3,5'-TeCB	44	44 + 47 + 65	24.50	C B	R1	0.55
2,2',3,6-TeCB	45	45 + 51	15.20	C B J	R1	0.55
2,2',3,6'-TeCB	46	—	—	U	—	0.55
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-2		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.791	K B J	U	0.55
2,2',4,5'-TeCB	49	49 + 69	3.24	C B J	U	0.55
2,2',4,6-TeCB	50	50 + 53	0.655	C K B J	U	0.55
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.20	B J	—	0.55
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.55
2,3,3',4-TeCB	55	—	—	U	—	0.55
2,3,3',4'-TeCB	56	—	1.67	B J	—	0.55
2,3,3',5-TeCB	57	—	—	U	—	0.55
2,3,3',5'-TeCB	58	—	—	U	—	0.55
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.55
2,3,4,4'-TeCB	60	—	0.940	B J	U	0.55
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	7.82	C B J	U	0.55
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.55
2,3,4',6-TeCB	64	—	2.17	B J	—	0.55
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.62	B J	U	0.55
2,3',4,5-TeCB	67	—	—	U	—	0.55
2,3',4,5'-TeCB	68	—	8.24	J	R1	0.55
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.55
2,3',5',6-TeCB	73	—	—	U	—	0.55
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.55
3,3',4,5-TeCB	78	—	—	U	—	0.55
3,3',4,5'-TeCB	79	—	—	U	—	0.55
3,3',5,5'-TeCB	80	—	—	U	—	0.55
3,4,4',5-TeCB	81	—	—	U	—	0.55
2,2',3,3',4-PeCB	82	—	0.706	K B J	U	0.55
2,2',3,3',5-PeCB	83	83 + 99	3.79	C B J	—	0.55
2,2',3,3',6-PeCB	84	—	2.34	K B J	U	0.557
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.28	C K B J	U	0.55
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	5.54	C B J	—	0.55
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.26	C K B J	U	0.55
2,2',3,4,6'-PeCB	89	—	—	U	—	0.55
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.73	C B J	U	0.55
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.36	K B J	U	0.55
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	6.48	C B J	U	0.55
2,2',3,5,6'-PeCB	94	—	—	U	—	0.55

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-2		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.55
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.55
2,2',4,6,6'-PeCB	104	—	—	U	—	0.55
2,3,3',4,4'-PeCB	105	—	2.92	B J	U	0.55
2,3,3',4,5-PeCB	106	—	—	U	—	0.55
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.55
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.55
2,3,3',4',6-PeCB	110	110 + 115	9.18	C B J	U	0.55
2,3,3',5,5'-PeCB	111	—	—	U	—	0.55
2,3,3',5,6-PeCB	112	—	—	U	—	0.55
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.55
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.19	K B J	U	0.55
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.55
2,3',4,5',6-PeCB	121	—	—	U	—	0.55
2',3,3',4,5-PeCB	122	—	—	U	—	0.55
2',3,4,4',5-PeCB	123	—	—	U	—	0.55
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.55
3,3',4,5,5'-PeCB	127	—	—	U	—	0.55
2,2',3,3',4,4'-HxCB	128	128 + 166	1.48	C J	—	0.55
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	8.43	C K B J	U	0.55
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.55
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.55
2,2',3,3',4,6'-HxCB	132	—	2.32	J	—	0.55
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.55
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.55
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.83	C K J	U	0.55
2,2',3,3',6,6'-HxCB	136	—	0.631	J	—	0.55
2,2',3,4,4',5-HxCB	137	—	0.702	K J	U	0.55
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.55
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.24	K J	U	0.55

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54117-2		Collection Date:	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.55
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.55
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.55
2,2',3,4',5,5'-HxCB	146	—	0.742	K J	U	0.55
2,2',3,4',5,6-HxCB	147	147 + 149	4.07	C B J	U	0.55
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.55
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.55
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.55
2,2',4,4',5,5'-HxCB	153	153 + 168	4.76	C B J	—	0.55
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.55
2,3,3',4,4',5-HxCB	156	156 + 157	1.15	C B J	—	0.55
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.55
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.55
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.55
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.55
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.606	K J	U	0.55
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.55
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.55
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.55
2,2',3,3',4,4',5-HpCB	170	—	1.19	B J	—	0.55
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.55
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.55
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.22	B J	—	0.55
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.55
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.55
2,2',3,3',4',5,6-HpCB	177	—	0.950	K J	U	0.55
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.55
2,2',3,3',5,6,6'-HpCB	179	—	0.668	K J	U	0.55
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.41	C K B J	U	0.55
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.55
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.55
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.12	C B J	—	0.55
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.55
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.55
2,2',3,4',5,5',6-HpCB	187	—	1.43	B J	U	0.55
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.55

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-2		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.55
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.55
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.55
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.55
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.599	K B J	U	0.55
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.55
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.55
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.55
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.08	C K B J	U	0.55
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.55
2,2',3,3',5,5',6,6'-OcCB	202	—	0.579	K J	U	0.55
2,2',3,4,4',5,5',6-OcCB	203	—	0.988	K B J	U	0.55
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.55
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.55
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.04	K J	U	1.04
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.925
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.933
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.10	K B J	U	0.55
Total PCBs	—	—	41.4	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-4		**Collection Date:**	9/13/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.17	K B J	U	0.561
3-MoCB	2	—	1.49	B J	U	0.561
4-MoCB	3	—	3.29	K B J	U	0.561
2,2'-DiCB	4	—	—	U	—	2.84
2,3-DiCB	5	—	—	U	—	2.77
2,3'-DiCB	6	—	—	U	—	2.5
2,4-DiCB	7	—	—	U	—	2.53
2,4'-DiCB	8	—	2.90	B J	U	2.3
2,5-DiCB	9	—	—	U	—	2.45
2,6-DiCB	10	—	—	U	—	2.41
3,3'-DiCB	11	—	14.8	B J	U	2.68
3,4-DiCB	12	12 + 13	—	C U	—	2.72
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.64
4,4'-DiCB	15	—	3.33	B J	U	2.63
2,2',3-TriCB	16	—	1.44	K B J	U	0.561
2,2',4-TriCB	17	—	2.71	K B J	U	0.561
2,2',5-TriCB	18	18 + 30	3.30	C B J	U	0.561
2,2',6-TriCB	19	—	—	U	—	0.561
2,3,3'-TriCB	20	20 + 28	6.08	C B J	U	0.561
2,3,4-TriCB	21	21 + 33	2.32	C B J	U	0.561
2,3,4'-TriCB	22	—	1.94	B J	U	0.561
2,3,5-TriCB	23	—	—	U	—	0.561
2,3,6-TriCB	24	—	—	U	—	0.561
2,3',4-TriCB	25	—	—	U	—	0.561
2,3',5-TriCB	26	26 + 29	0.752	C J	—	0.561
2,3',6-TriCB	27	—	—	U	—	0.561
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.87	B J	U	0.561
2,4',6-TriCB	32	—	0.843	B J	U	0.561
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.561
3,3',4-TriCB	35	—	—	U	—	0.561
3,3',5-TriCB	36	—	—	U	—	0.561
3,4,4'-TriCB	37	—	0.939	K B J	U	0.561
3,4,5-TriCB	38	—	—	U	—	0.561
3,4',5-TriCB	39	—	—	U	—	0.561
2,2',3,3'-TeCB	40	40 + 41 + 71	2.06	C K B J	U	0.561
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.04	K B J	U	0.561
2,2',3,5-TeCB	43	—	—	U	—	0.561
2,2',3,5'-TeCB	44	44 + 47 + 65	32.4	C B	R1	0.561
2,2',3,6-TeCB	45	45 + 51	21.8	C B J	R1	0.561
2,2',3,6'-TeCB	46	—	0.573	K J	U	0.561
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54147-4		Collection Date: 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.10	B J	—	0.561
2,2',4,5'-TeCB	49	49 + 69	3.80	C K B J	U	0.561
2,2',4,6-TeCB	50	50 + 53	0.772	C B J	U	0.561
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.27	B J	—	0.561
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.561
2,3,3',4-TeCB	55	—	—	U	—	0.561
2,3,3',4'-TeCB	56	—	1.32	K B J	U	0.561
2,3,3',5-TeCB	57	—	—	U	—	0.561
2,3,3',5'-TeCB	58	—	—	U	—	0.561
2,3,3',6-TeCB	59	59 + 62 + 75	0.796	C K J	U	0.561
2,3,4,4'-TeCB	60	—	1.13	B J	U	0.561
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	8.87	C B J	U	0.561
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.561
2,3,4',6-TeCB	64	—	2.21	K B J	U	0.561
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.61	B J	U	0.561
2,3',4,5-TeCB	67	—	—	U	—	0.561
2,3',4,5'-TeCB	68	—	34.0	—	R1	0.561
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.561
2,3',5',6-TeCB	73	—	—	U	—	0.561
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.561
3,3',4,5-TeCB	78	—	—	U	—	0.561
3,3',4,5'-TeCB	79	—	—	U	—	0.561
3,3',5,5'-TeCB	80	—	—	U	—	0.561
3,4,4',5-TeCB	81	—	—	U	—	0.561
2,2',3,3',4-PeCB	82	—	1.21	B J	—	0.561
2,2',3,3',5-PeCB	83	83 + 99	4.86	C B J	—	0.561
2,2',3,3',6-PeCB	84	—	2.62	K B J	U	0.561
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.19	C B J	—	0.561
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	5.29	C B J	—	0.561
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.18	C K B J	U	0.561
2,2',3,4,6'-PeCB	89	—	—	U	—	0.561
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.85	C K B J	U	0.561
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.37	B J	—	0.561
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	6.50	C B J	U	0.561
2,2',3,5,6'-PeCB	94	—	—	U	—	0.561

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-4		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.561
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.561
2,2',4,6,6'-PeCB	104	—	—	U	—	0.561
2,3,3',4,4'-PeCB	105	—	2.39	B J	U	0.561
2,3,3',4,5-PeCB	106	—	—	U	—	0.561
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.561
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.561
2,3,3',4',6-PeCB	110	110 + 115	7.57	C B J	U	0.561
2,3,3',5,5'-PeCB	111	—	—	U	—	0.561
2,3,3',5,6-PeCB	112	—	—	U	—	0.561
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.561
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.90	K B J	U	0.561
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.561
2,3',4,5',6-PeCB	121	—	—	U	—	0.561
2',3,3',4,5-PeCB	122	—	—	U	—	0.561
2',3,4,4',5-PeCB	123	—	—	U	—	0.561
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.561
3,3',4,5,5'-PeCB	127	—	—	U	—	0.561
2,2',3,3',4,4'-HxCB	128	128 + 166	1.14	C J	—	0.561
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.43	C B J	—	0.561
2,2',3,3',4,5'-HxCB	130	—	0.911	B J	—	0.561
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.561
2,2',3,3',4,6'-HxCB	132	—	2.00	J	—	0.561
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.561
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.561
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.33	C J	—	0.561
2,2',3,3',6,6'-HxCB	136	—	0.660	J	—	0.561
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.561
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.561
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.750	K J	U	0.561

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-4		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.561
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.561
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.561
2,2',3,4',5,5'-HxCB	146	—	0.673	K J	U	0.561
2,2',3,4',5,6-HxCB	147	147 + 149	5.31	C B J	U	0.561
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.561
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.561
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.561
2,2',4,4',5,5'-HxCB	153	153 + 168	5.08	C B J	—	0.561
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.561
2,3,3',4,4',5-HxCB	156	156 + 157	0.787	C K B J	U	0.561
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.561
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.561
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.561
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.561
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.561
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.561
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.561
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.561
2,2',3,3',4,4',5-HpCB	170	—	1.01	K B J	U	0.561
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.561
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.561
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.862	K B J	U	0.561
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.561
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.561
2,2',3,3',4',5,6-HpCB	177	—	0.645	J	—	0.561
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.561
2,2',3,3',5,6,6'-HpCB	179	—	0.637	K J	U	0.561
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.72	C B J	—	0.561
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.561
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.561
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.853	C K B J	U	0.561
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.561
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.561
2,2',3,4',5,5',6-HpCB	187	—	1.87	B J	U	0.561
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.561

Table B2-5. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-4		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.561
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.561
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.561
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.561
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.958	K B J	U	0.561
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.561
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.561
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.561
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.29	C K B J	U	0.561
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.561
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.561
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	0.561
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.561
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.561
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.16
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.01
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.949
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.58	B J	U	0.561
Total PCBs	—	—	45.0	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-2		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.33	B J	U	0.523
3-MoCB	2	—	2.72	B J	U	0.523
4-MoCB	3	—	8.26	B J	U	0.523
2,2'-DiCB	4	—	—	U	—	5.75
2,3-DiCB	5	—	—	U	—	4.45
2,3'-DiCB	6	—	—	U	—	4.03
2,4-DiCB	7	—	—	U	—	4.2
2,4'-DiCB	8	—	—	U	—	3.86
2,5-DiCB	9	—	—	U	—	3.93
2,6-DiCB	10	—	—	U	—	4.07
3,3'-DiCB	11	—	8.61	B J	—	4.35
3,4-DiCB	12	12 + 13	—	C U	—	4.4
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	4.14
4,4'-DiCB	15	—	5.71	B J	U	4.55
2,2',3-TriCB	16	—	1.48	J	—	0.881
2,2',4-TriCB	17	—	4.53	J	—	0.712
2,2',5-TriCB	18	18 + 30	3.02	C K B J	U	0.597
2,2',6-TriCB	19	—	—	U	—	0.608
2,3,3'-TriCB	20	20 + 28	6.93	C B J	U	0.523
2,3,4-TriCB	21	21 + 33	1.56	C B J	U	0.523
2,3,4'-TriCB	22	—	1.57	B J	—	0.542
2,3,5-TriCB	23	—	—	U	—	0.541
2,3,6-TriCB	24	—	—	U	—	0.537
2,3',4-TriCB	25	—	1.53	J	—	0.523
2,3',5-TriCB	26	26 + 29	0.797	C J	—	0.523
2,3',6-TriCB	27	—	—	U	—	0.523
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.22	B J	U	0.523
2,4',6-TriCB	32	—	0.582	K J	U	0.523
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.523
3,3',4-TriCB	35	—	—	U	—	0.523
3,3',5-TriCB	36	—	—	U	—	0.523
3,4,4'-TriCB	37	—	1.26	J	—	0.549
3,4,5-TriCB	38	—	—	U	—	0.523
3,4',5-TriCB	39	—	—	U	—	0.523
2,2',3,3'-TeCB	40	40 + 41 + 71	1.17	C K J	U	0.823
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.86
2,2',3,5-TeCB	43	—	—	U	—	1
2,2',3,5'-TeCB	44	44 + 47 + 65	59.5	C B	R1	0.755
2,2',3,6-TeCB	45	45 + 51	8.01	C J	R1	0.815
2,2',3,6'-TeCB	46	—	—	U	—	0.94
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-2		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.827
2,2',4,5'-TeCB	49	49 + 69	3.41	C B J	—	0.704
2,2',4,6-TeCB	50	50 + 53	0.816	C K J	U	0.793
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	5.86	B J	U	0.753
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.523
2,3,3',4-TeCB	55	—	—	U	—	1.08
2,3,3',4'-TeCB	56	—	1.12	J	—	1.05
2,3,3',5-TeCB	57	—	—	U	—	1.03
2,3,3',5'-TeCB	58	—	—	U	—	1.02
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.626
2,3,4,4'-TeCB	60	—	—	U	—	1.06
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.01	C B J	—	1.01
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.961
2,3,4',6-TeCB	64	—	1.67	K B J	U	0.603
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.76	B J	U	0.945
2,3',4,5-TeCB	67	—	—	U	—	0.902
2,3',4,5'-TeCB	68	—	46.6	—	R1	0.995
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.974
2,3',5',6-TeCB	73	—	—	U	—	0.61
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.982
3,3',4,5-TeCB	78	—	—	U	—	1.01
3,3',4,5'-TeCB	79	—	—	U	—	0.855
3,3',5,5'-TeCB	80	—	—	U	—	0.924
3,4,4',5-TeCB	81	—	—	U	—	0.968
2,2',3,3',4-PeCB	82	—	0.712	J	—	0.671
2,2',3,3',5-PeCB	83	83 + 99	3.16	C B J	—	0.604
2,2',3,3',6-PeCB	84	—	1.92	J	—	0.688
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.54	C K J	U	0.525
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	4.38	C B J	—	0.539
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.11	C K J	U	0.62
2,2',3,4,6'-PeCB	89	—	—	U	—	0.634
2,2',3,4',5-PeCB	90	90 + 101 + 113	5.03	C B J	U	0.549
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	0.712	K J	U	0.604
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.29	C B J	U	0.605
2,2',3,5,6'-PeCB	94	—	—	U	—	0.673

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-2		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.523
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.553
2,2',4,6,6'-PeCB	104	—	—	U	—	0.523
2,3,3',4,4'-PeCB	105	—	1.96	K B J	U	0.523
2,3,3',4,5-PeCB	106	—	—	U	—	0.523
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.523
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.523
2,3,3',4',6-PeCB	110	110 + 115	5.95	C B J	—	0.523
2,3,3',5,5'-PeCB	111	—	—	U	—	0.523
2,3,3',5,6-PeCB	112	—	—	U	—	0.523
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.523
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.51	B J	U	0.523
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.523
2,3',4,5',6-PeCB	121	—	—	U	—	0.523
2',3,3',4,5-PeCB	122	—	—	U	—	0.523
2',3,4,4',5-PeCB	123	—	—	U	—	0.523
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.523
3,3',4,5,5'-PeCB	127	—	—	U	—	0.523
2,2',3,3',4,4'-HxCB	128	128 + 166	0.858	C K J	U	0.523
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	5.21	C B J	U	0.523
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.523
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.523
2,2',3,3',4,6'-HxCB	132	—	2.28	K J	U	0.523
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.523
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.523
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.02	C B J	—	0.523
2,2',3,3',6,6'-HxCB	136	—	0.526	K J	U	0.523
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.523
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.523
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.10	K J	U	0.523

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-2		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.523
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.523
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.523
2,2',3,4',5,5'-HxCB	146	—	0.830	K J	U	0.523
2,2',3,4',5,6-HxCB	147	147 + 149	3.83	C B J	—	0.523
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.523
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.523
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.523
2,2',4,4',5,5'-HxCB	153	153 + 168	4.95	C B J	—	0.523
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.523
2,3,3',4,4',5-HxCB	156	156 + 157	0.761	C J	—	0.523
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.523
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.523
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.523
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.523
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.523
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.523
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.523
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.523
2,2',3,3',4,4',5-HpCB	170	—	0.730	K J	U	0.523
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.523
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.523
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.956	J	—	0.523
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.523
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.523
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.523
2,2',3,3',5,5',6-HpCB	178	—	0.552	K J	U	0.523
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.523
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.92	C J	—	0.523
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.523
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.523
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.523
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.523
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.523
2,2',3,4',5,5',6-HpCB	187	—	1.84	B J	U	0.523
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.523

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-2		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.523
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.523
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.523
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.523
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.546	K J	U	0.523
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.523
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.523
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.523
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.27	C K J	U	0.523
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.523
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.523
2,2',3,4,4',5,5',6-OcCB	203	—	0.665	J	—	0.523
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.523
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.523
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.41
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.57
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.72
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.62	B J	—	0.523
Total PCBs	—	—	63.2	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-2		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.87	B J	U	0.57
3-MoCB	2	—	3.14	B J	U	0.57
4-MoCB	3	—	9.53	B J	U	0.57
2,2'-DiCB	4	—	5.07	K J	U	3.91
2,3-DiCB	5	—	—	U	—	3
2,3'-DiCB	6	—	—	U	—	2.72
2,4-DiCB	7	—	3.34	B J	U	2.83
2,4'-DiCB	8	—	3.69	J	—	2.61
2,5-DiCB	9	—	—	U	—	2.65
2,6-DiCB	10	—	—	U	—	2.75
3,3'-DiCB	11	—	8.85	B J	—	2.93
3,4-DiCB	12	12 + 13	—	C U	—	2.97
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.79
4,4'-DiCB	15	—	7.48	B J	U	3.04
2,2',3-TriCB	16	—	5.55	J	—	0.826
2,2',4-TriCB	17	—	9.05	J	—	0.667
2,2',5-TriCB	18	18 + 30	10.2	C B J	—	0.57
2,2',6-TriCB	19	—	2.00	J	—	0.57
2,3,3'-TriCB	20	20 + 28	13.0	C B J	—	0.57
2,3,4-TriCB	21	21 + 33	8.92	C B J	—	0.57
2,3,4'-TriCB	22	—	4.30	B J	—	0.57
2,3,5-TriCB	23	—	—	U	—	0.57
2,3,6-TriCB	24	—	—	U	—	0.57
2,3',4-TriCB	25	—	2.97	J	—	0.57
2,3',5-TriCB	26	26 + 29	1.66	C J	—	0.57
2,3',6-TriCB	27	—	1.01	J	—	0.57
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	7.29	B J	—	0.57
2,4',6-TriCB	32	—	2.82	J	—	0.57
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.57
3,3',4-TriCB	35	—	—	U	—	0.57
3,3',5-TriCB	36	—	—	U	—	0.57
3,4,4'-TriCB	37	—	1.92	J	—	0.57
3,4,5-TriCB	38	—	—	U	—	0.57
3,4',5-TriCB	39	—	—	U	—	0.57
2,2',3,3'-TeCB	40	40 + 41 + 71	2.54	C J	—	0.909
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.42	J	—	0.95
2,2',3,5-TeCB	43	—	—	U	—	1.11
2,2',3,5'-TeCB	44	44 + 47 + 65	625	C B	R1	0.834
2,2',3,6-TeCB	45	45 + 51	146	C	R1	0.9
2,2',3,6'-TeCB	46	—	—	U	—	1.04
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-2		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.18	K J	U	0.913
2,2',4,5'-TeCB	49	49 + 69	12.9	C B J	—	0.778
2,2',4,6-TeCB	50	50 + 53	1.10	C K J	U	0.876
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.44	B J	U	0.832
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.57
2,3,3',4-TeCB	55	—	—	U	—	1.24
2,3,3',4'-TeCB	56	—	1.68	K J	U	1.2
2,3,3',5-TeCB	57	—	—	U	—	1.17
2,3,3',5'-TeCB	58	—	—	U	—	1.17
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.692
2,3,4,4'-TeCB	60	—	—	U	—	1.21
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.83	C B J	—	1.16
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.1
2,3,4',6-TeCB	64	—	1.84	B J	U	0.666
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.87	K B J	U	1.08
2,3',4,5-TeCB	67	—	—	U	—	1.03
2,3',4,5'-TeCB	68	—	345	—	R1	1.14
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.11
2,3',5',6-TeCB	73	—	—	U	—	0.674
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.13
3,3',4,5-TeCB	78	—	—	U	—	1.15
3,3',4,5'-TeCB	79	—	—	U	—	0.978
3,3',5,5'-TeCB	80	—	—	U	—	1.06
3,4,4',5-TeCB	81	—	—	U	—	1.12
2,2',3,3',4-PeCB	82	—	0.656	K J	U	0.57
2,2',3,3',5-PeCB	83	83 + 99	6.11	C B J	—	0.57
2,2',3,3',6-PeCB	84	—	1.50	J	—	0.57
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.36	C J	—	0.57
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	4.08	C B J	—	0.57
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.50	C J	—	0.57
2,2',3,4,6'-PeCB	89	—	—	U	—	0.57
2,2',3,4',5-PeCB	90	90 + 101 + 113	8.40	C B J	U	0.57
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.09	J	—	0.57
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.28	C B J	U	0.57
2,2',3,5,6'-PeCB	94	—	—	U	—	0.57

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-2		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.57
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.57
2,2',4,6,6'-PeCB	104	—	—	U	—	0.57
2,3,3',4,4'-PeCB	105	—	1.90	K B J	U	0.57
2,3,3',4,5-PeCB	106	—	—	U	—	0.57
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.57
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.57
2,3,3',4',6-PeCB	110	110 + 115	5.85	C K B J	U	0.57
2,3,3',5,5'-PeCB	111	—	—	U	—	0.57
2,3,3',5,6-PeCB	112	—	—	U	—	0.57
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.57
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.90	B J	U	0.57
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.57
2,3',4,5',6-PeCB	121	—	—	U	—	0.57
2',3,3',4,5-PeCB	122	—	—	U	—	0.57
2',3,4,4',5-PeCB	123	—	—	U	—	0.57
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.57
3,3',4,5,5'-PeCB	127	—	—	U	—	0.57
2,2',3,3',4,4'-HxCB	128	128 + 166	1.22	C K J	U	0.57
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	8.22	C B J	—	0.57
2,2',3,3',4,5'-HxCB	130	—	0.736	K J	U	0.57
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.57
2,2',3,3',4,6'-HxCB	132	—	2.17	J	—	0.57
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.57
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.57
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.07	C K B J	U	0.57
2,2',3,3',6,6'-HxCB	136	—	0.910	J	—	0.57
2,2',3,4,4',5-HxCB	137	—	0.808	J	—	0.57
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.57
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.17	K J	U	0.57

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-2		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.57
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.57
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.57
2,2',3,4',5,5'-HxCB	146	—	1.04	J	—	0.57
2,2',3,4',5,6-HxCB	147	147 + 149	5.65	C B J	—	0.57
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.57
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.57
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.57
2,2',4,4',5,5'-HxCB	153	153 + 168	8.59	C B J	—	0.57
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.57
2,3,3',4,4',5-HxCB	156	156 + 157	1.02	C K J	U	0.57
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.795	K J	U	0.57
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.57
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.57
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.57
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.683	J	—	0.57
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.57
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.57
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.57
2,2',3,3',4,4',5-HpCB	170	—	1.59	K J	U	0.57
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.57
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.57
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.23	J	—	0.57
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.57
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.57
2,2',3,3',4',5,6-HpCB	177	—	0.689	K J	U	0.57
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.57
2,2',3,3',5,6,6'-HpCB	179	—	0.763	K J	U	0.57
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.50	C J	—	0.57
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.57
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.57
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.597	C K J	U	0.57
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.57
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.57
2,2',3,4',5,5',6-HpCB	187	—	2.83	B J	U	0.57
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.57

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-2		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.57
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.57
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.57
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.57
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.968	K J	U	0.57
2,2',3,3',4,4',5,6-OcCB	195	—	0.612	K J	U	0.57
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.57
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.57
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.75	C J	—	0.57
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.57
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.57
2,2',3,4,4',5,5',6-OcCB	203	—	1.01	J	—	0.57
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.57
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.57
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.28
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.5
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.67
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.06	B J	—	0.57
Total PCBs	—	—	160	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-2		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.00	B J	U	0.515
3-MoCB	2	—	2.48	B J	U	0.515
4-MoCB	3	—	7.12	B J	U	0.515
2,2'-DiCB	4	—	—	U	—	3.9
2,3-DiCB	5	—	—	U	—	3
2,3'-DiCB	6	—	—	U	—	2.73
2,4-DiCB	7	—	3.33	K B J	U	2.83
2,4'-DiCB	8	—	2.65	K J	U	2.57
2,5-DiCB	9	—	—	U	—	2.7
2,6-DiCB	10	—	—	U	—	2.78
3,3'-DiCB	11	—	8.74	B J	—	2.92
3,4-DiCB	12	12 + 13	—	C U	—	2.96
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.83
4,4'-DiCB	15	—	6.40	B J	U	2.97
2,2',3-TriCB	16	—	2.73	J	—	0.515
2,2',4-TriCB	17	—	4.13	J	—	0.515
2,2',5-TriCB	18	18 + 30	6.03	C B J	—	0.515
2,2',6-TriCB	19	—	1.25	J	—	0.515
2,3,3'-TriCB	20	20 + 28	10.2	C B J	—	0.515
2,3,4-TriCB	21	21 + 33	3.65	C B J	U	0.515
2,3,4'-TriCB	22	—	3.55	B J	—	0.515
2,3,5-TriCB	23	—	—	U	—	0.515
2,3,6-TriCB	24	—	—	U	—	0.515
2,3',4-TriCB	25	—	0.975	J	—	0.515
2,3',5-TriCB	26	26 + 29	1.36	C J	—	0.515
2,3',6-TriCB	27	—	0.562	J	—	0.515
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	6.05	B J	U	0.515
2,4',6-TriCB	32	—	1.65	K J	U	0.515
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.515
3,3',4-TriCB	35	—	—	U	—	0.515
3,3',5-TriCB	36	—	—	U	—	0.515
3,4,4'-TriCB	37	—	1.89	J	—	0.515
3,4,5-TriCB	38	—	—	U	—	0.515
3,4',5-TriCB	39	—	—	U	—	0.515
2,2',3,3'-TeCB	40	40 + 41 + 71	3.01	C J	—	0.652
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.34	K J	U	0.674
2,2',3,5-TeCB	43	—	—	U	—	0.796
2,2',3,5'-TeCB	44	44 + 47 + 65	57.7	C B	R1	0.6
2,2',3,6-TeCB	45	45 + 51	36.6	C	R1	0.641
2,2',3,6'-TeCB	46	—	—	U	—	0.732
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-2		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.949	K J	U	0.642
2,2',4,5'-TeCB	49	49 + 69	4.28	C B J	—	0.553
2,2',4,6-TeCB	50	50 + 53	0.751	C J	—	0.625
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.66	B J	U	0.6
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.515
2,3,3',4-TeCB	55	—	—	U	—	1.24
2,3,3',4'-TeCB	56	—	1.77	J	—	1.24
2,3,3',5-TeCB	57	—	—	U	—	1.17
2,3,3',5'-TeCB	58	—	—	U	—	1.19
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.515
2,3,4,4'-TeCB	60	—	—	U	—	1.24
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	7.92	C B J	—	1.18
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.13
2,3,4',6-TeCB	64	—	2.71	K B J	U	0.515
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.90	B J	U	1.13
2,3',4,5-TeCB	67	—	—	U	—	1.05
2,3',4,5'-TeCB	68	—	61.4	—	R1	1.12
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.14
2,3',5',6-TeCB	73	—	—	U	—	0.515
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.19
3,3',4,5-TeCB	78	—	—	U	—	1.19
3,3',4,5'-TeCB	79	—	—	U	—	1.04
3,3',5,5'-TeCB	80	—	—	U	—	1.11
3,4,4',5-TeCB	81	—	—	U	—	1.16
2,2',3,3',4-PeCB	82	—	0.924	K J	U	0.515
2,2',3,3',5-PeCB	83	83 + 99	5.29	C B J	—	0.515
2,2',3,3',6-PeCB	84	—	1.73	J	—	0.515
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.37	C K J	U	0.515
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	5.89	C B J	—	0.515
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.66	C K J	U	0.515
2,2',3,4,6'-PeCB	89	—	—	U	—	0.515
2,2',3,4',5-PeCB	90	90 + 101 + 113	8.06	C B J	U	0.515
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.21	K J	U	0.515
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.59	C B J	U	0.515
2,2',3,5,6'-PeCB	94	—	—	U	—	0.515

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-2		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.515
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.515
2,2',4,6,6'-PeCB	104	—	—	U	—	0.515
2,3,3',4,4'-PeCB	105	—	3.25	B J	—	0.515
2,3,3',4,5-PeCB	106	—	—	U	—	0.515
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.515
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.621	K J	U	0.515
2,3,3',4',6-PeCB	110	110 + 115	9.15	C K B J	U	0.515
2,3,3',5,5'-PeCB	111	—	—	U	—	0.515
2,3,3',5,6-PeCB	112	—	—	U	—	0.515
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.515
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.16	B J	—	0.515
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.515
2,3',4,5',6-PeCB	121	—	—	U	—	0.515
2',3,3',4,5-PeCB	122	—	—	U	—	0.515
2',3,4,4',5-PeCB	123	—	—	U	—	0.515
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.515
3,3',4,5,5'-PeCB	127	—	—	U	—	0.515
2,2',3,3',4,4'-HxCB	128	128 + 166	1.69	C K J	U	0.515
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	9.62	C B J	—	0.515
2,2',3,3',4,5'-HxCB	130	—	0.703	K J	U	0.515
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.515
2,2',3,3',4,6'-HxCB	132	—	2.91	K J	U	0.515
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.515
2,2',3,3',5,6-HxCB	134	134 + 143	0.556	C J	—	0.515
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.04	C K B J	U	0.515
2,2',3,3',6,6'-HxCB	136	—	0.877	J	—	0.515
2,2',3,4,4',5-HxCB	137	—	0.520	J	—	0.515
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.515
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.81	J	—	0.515

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-2		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.515
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.515
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.515
2,2',3,4',5,5'-HxCB	146	—	1.37	K J	U	0.515
2,2',3,4',5,6-HxCB	147	147 + 149	5.59	C K B J	U	0.515
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.515
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.515
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.515
2,2',4,4',5,5'-HxCB	153	153 + 168	8.14	C B J	—	0.515
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.515
2,3,3',4,4',5-HxCB	156	156 + 157	1.42	C J	—	0.515
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.801	K J	U	0.515
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.515
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.515
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.515
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.608	K J	U	0.515
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.515
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.616	K J	U	0.515
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.515
2,2',3,3',4,4',5-HpCB	170	—	2.04	K J	U	0.515
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.515
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.515
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	0.515
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.515
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.515
2,2',3,3',4',5,6-HpCB	177	—	0.947	J	—	0.515
2,2',3,3',5,5',6-HpCB	178	—	0.606	K J	U	0.515
2,2',3,3',5,6,6'-HpCB	179	—	0.690	J	—	0.515
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.06	C J	—	0.515
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.515
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.515
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.38	C K J	U	0.515
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.515
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.515
2,2',3,4',5,5',6-HpCB	187	—	2.70	B J	U	0.515
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.515

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-2		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.515
2,3,3',4,4',5,6-HpCB	190	—	0.616	K J	U	0.515
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.515
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.515
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.07	K J	U	0.515
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.515
2,2',3,3',4,4',5,6'-OcCB	196	—	0.691	J	—	0.515
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.515
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.41	C K J	U	0.515
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.515
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.515
2,2',3,4,4',5,5',6-OcCB	203	—	1.01	K J	U	0.515
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.515
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.515
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.48
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.85
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.84
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.74	B J	—	0.515
Total PCBs	—	—	114	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-2		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.35	B J	U	0.512
3-MoCB	2	—	2.51	B J	U	0.512
4-MoCB	3	—	8.00	B J	U	0.512
2,2'-DiCB	4	—	—	U	—	3.19
2,3-DiCB	5	—	—	U	—	2.54
2,3'-DiCB	6	—	—	U	—	2.31
2,4-DiCB	7	—	3.66	B J	U	2.39
2,4'-DiCB	8	—	—	U	—	2.17
2,5-DiCB	9	—	—	U	—	2.29
2,6-DiCB	10	—	—	U	—	2.35
3,3'-DiCB	11	—	9.36	B J	—	2.47
3,4-DiCB	12	12 + 13	—	C U	—	2.5
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.4
4,4'-DiCB	15	—	6.34	B J	U	2.56
2,2',3-TriCB	16	—	2.95	J	—	0.512
2,2',4-TriCB	17	—	5.12	J	—	0.512
2,2',5-TriCB	18	18 + 30	5.97	C B J	—	0.512
2,2',6-TriCB	19	—	1.14	K J	U	0.512
2,3,3'-TriCB	20	20 + 28	11.7	C B J	—	0.512
2,3,4-TriCB	21	21 + 33	7.67	C B J	—	0.512
2,3,4'-TriCB	22	—	3.69	B J	—	0.512
2,3,5-TriCB	23	—	—	U	—	0.512
2,3,6-TriCB	24	—	—	U	—	0.512
2,3',4-TriCB	25	—	1.80	J	—	0.512
2,3',5-TriCB	26	26 + 29	1.42	C J	—	0.512
2,3',6-TriCB	27	—	0.708	J	—	0.512
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	6.49	B J	—	0.512
2,4',6-TriCB	32	—	1.62	J	—	0.512
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.512
3,3',4-TriCB	35	—	—	U	—	0.512
3,3',5-TriCB	36	—	—	U	—	0.512
3,4,4'-TriCB	37	—	1.91	J	—	0.512
3,4,5-TriCB	38	—	—	U	—	0.512
3,4',5-TriCB	39	—	—	U	—	0.512
2,2',3,3'-TeCB	40	40 + 41 + 71	3.28	C J	—	0.714
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.16	J	—	0.738
2,2',3,5-TeCB	43	—	—	U	—	0.871
2,2',3,5'-TeCB	44	44 + 47 + 65	311	C B	R1	0.657
2,2',3,6-TeCB	45	45 + 51	139	C	R1	0.701
2,2',3,6'-TeCB	46	—	—	U	—	0.802
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-2		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.01	K J	U	0.703
2,2',4,5'-TeCB	49	49 + 69	9.33	C B J	—	0.606
2,2',4,6-TeCB	50	50 + 53	1.15	C K J	U	0.684
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	5.90	B J	U	0.657
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.512
2,3,3',4-TeCB	55	—	—	U	—	1.14
2,3,3',4'-TeCB	56	—	1.75	J	—	1.14
2,3,3',5-TeCB	57	—	—	U	—	1.07
2,3,3',5'-TeCB	58	—	—	U	—	1.09
2,3,3',6-TeCB	59	59 + 62 + 75	0.644	C K J	U	0.552
2,3,4,4'-TeCB	60	—	—	U	—	1.14
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.80	C B J	—	1.08
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.03
2,3,4',6-TeCB	64	—	2.07	B J	U	0.53
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.96	B J	—	1.03
2,3',4,5-TeCB	67	—	—	U	—	0.964
2,3',4,5'-TeCB	68	—	199	—	R1	1.03
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.04
2,3',5',6-TeCB	73	—	—	U	—	0.532
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.08
3,3',4,5-TeCB	78	—	—	U	—	1.09
3,3',4,5'-TeCB	79	—	—	U	—	0.949
3,3',5,5'-TeCB	80	—	—	U	—	1.01
3,4,4',5-TeCB	81	—	—	U	—	1.04
2,2',3,3',4-PeCB	82	—	0.755	K J	U	0.512
2,2',3,3',5-PeCB	83	83 + 99	4.86	C K B J	U	0.512
2,2',3,3',6-PeCB	84	—	1.51	K J	U	0.512
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.29	C K J	U	0.512
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	4.12	C B J	—	0.512
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.91	C J	—	0.512
2,2',3,4,6'-PeCB	89	—	—	U	—	0.512
2,2',3,4',5-PeCB	90	90 + 101 + 113	5.33	C B J	U	0.512
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	0.840	J	—	0.512
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	4.77	C B J	U	0.512
2,2',3,5,6'-PeCB	94	—	—	U	—	0.512

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-2		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.512
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.512
2,2',4,6,6'-PeCB	104	—	—	U	—	0.512
2,3,3',4,4'-PeCB	105	—	2.09	B J	—	0.512
2,3,3',4,5-PeCB	106	—	—	U	—	0.512
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.512
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.512
2,3,3',4',6-PeCB	110	110 + 115	5.74	C B J	—	0.512
2,3,3',5,5'-PeCB	111	—	—	U	—	0.512
2,3,3',5,6-PeCB	112	—	—	U	—	0.512
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.512
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	4.07	B J	U	0.512
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.512
2,3',4,5',6-PeCB	121	—	—	U	—	0.512
2',3,3',4,5-PeCB	122	—	—	U	—	0.512
2',3,4,4',5-PeCB	123	—	—	U	—	0.512
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.512
3,3',4,5,5'-PeCB	127	—	—	U	—	0.512
2,2',3,3',4,4'-HxCB	128	128 + 166	1.21	C J	—	0.512
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.93	C B J	—	0.512
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.512
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.512
2,2',3,3',4,6'-HxCB	132	—	2.56	J	—	0.512
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.512
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.512
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.59	C K B J	U	0.512
2,2',3,3',6,6'-HxCB	136	—	0.699	J	—	0.512
2,2',3,4,4',5-HxCB	137	—	0.682	J	—	0.512
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.512
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.921	K J	U	0.512

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-2		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.512
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.512
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.512
2,2',3,4',5,5'-HxCB	146	—	0.651	K J	U	0.512
2,2',3,4',5,6-HxCB	147	147 + 149	4.86	C B J	—	0.512
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.512
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.512
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.512
2,2',4,4',5,5'-HxCB	153	153 + 168	5.17	C B J	—	0.512
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.512
2,3,3',4,4',5-HxCB	156	156 + 157	1.06	C K J	U	0.512
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.512
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.512
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.512
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.512
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.512
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.512
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.512
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.512
2,2',3,3',4,4',5-HpCB	170	—	1.28	J	—	0.512
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.512
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.512
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	0.512
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.512
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.512
2,2',3,3',4',5,6-HpCB	177	—	0.738	K J	U	0.512
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.512
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.512
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.84	C K J	U	0.512
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.512
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.512
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.666	C K J	U	0.512
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.512
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.512
2,2',3,4',5,5',6-HpCB	187	—	1.97	B J	U	0.512
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.512

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-2		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.512
2,3,3',4,4',5,6-HpCB	190	—	0.593	J	—	0.512
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.512
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.512
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.555	K J	U	0.512
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.512
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.512
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.512
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	0.919	C K J	U	0.512
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.512
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.512
2,2',3,4,4',5,5',6-OcCB	203	—	0.593	K J	U	0.512
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.512
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.512
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.56
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.69
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.7
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.65	K B J	U	0.512
Total PCBs	—	—	125	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-2		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.71	B J	U	0.532
3-MoCB	2	—	1.87	B J	U	0.532
4-MoCB	3	—	3.11	B J	U	0.532
2,2'-DiCB	4	—	2.00	J	—	0.875
2,3-DiCB	5	—	—	U	—	0.768
2,3'-DiCB	6	—	0.834	K J	U	0.667
2,4-DiCB	7	—	0.775	J	—	0.671
2,4'-DiCB	8	—	2.23	B J	U	0.599
2,5-DiCB	9	—	—	U	—	0.669
2,6-DiCB	10	—	—	U	—	0.648
3,3'-DiCB	11	—	11.6	B J	U	0.772
3,4-DiCB	12	12 + 13	—	C U	—	0.786
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.702
4,4'-DiCB	15	—	2.87	B J	U	0.849
2,2',3-TriCB	16	—	2.02	B J	—	0.532
2,2',4-TriCB	17	—	3.62	J	—	0.532
2,2',5-TriCB	18	18 + 30	4.74	C B J	—	0.532
2,2',6-TriCB	19	—	0.905	K J	U	0.532
2,3,3'-TriCB	20	20 + 28	9.03	C B J	—	0.532
2,3,4-TriCB	21	21 + 33	2.96	C B J	—	0.532
2,3,4'-TriCB	22	—	3.41	B J	—	0.532
2,3,5-TriCB	23	—	—	U	—	0.532
2,3,6-TriCB	24	—	—	U	—	0.532
2,3',4-TriCB	25	—	0.982	J	—	0.532
2,3',5-TriCB	26	26 + 29	1.27	C K J	U	0.532
2,3',6-TriCB	27	—	—	U	—	0.532
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	5.47	B J	U	0.532
2,4',6-TriCB	32	—	0.809	J	—	0.532
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.532
3,3',4-TriCB	35	—	—	U	—	0.532
3,3',5-TriCB	36	—	—	U	—	0.532
3,4,4'-TriCB	37	—	2.28	B J	—	0.532
3,4,5-TriCB	38	—	—	U	—	0.532
3,4',5-TriCB	39	—	—	U	—	0.532
2,2',3,3'-TeCB	40	40 + 41 + 71	4.12	C B J	—	0.532
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.29	K J	U	0.532
2,2',3,5-TeCB	43	—	—	U	—	0.532
2,2',3,5'-TeCB	44	44 + 47 + 65	75.9	C B	R1	0.532
2,2',3,6-TeCB	45	45 + 51	19.9	C J	R1	0.532
2,2',3,6'-TeCB	46	—	—	U	—	0.532
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-2		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.11	J	—	0.532
2,2',4,5'-TeCB	49	49 + 69	4.18	C B J	—	0.532
2,2',4,6-TeCB	50	50 + 53	1.03	C K J	U	0.532
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.72	B J	—	0.532
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.532
2,3,3',4-TeCB	55	—	—	U	—	0.532
2,3,3',4'-TeCB	56	—	2.76	B J	U	0.532
2,3,3',5-TeCB	57	—	—	U	—	0.532
2,3,3',5'-TeCB	58	—	—	U	—	0.532
2,3,3',6-TeCB	59	59 + 62 + 75	0.887	C K J	U	0.532
2,3,4,4'-TeCB	60	—	1.33	J	—	0.532
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	11.2	C B J	U	0.532
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.532
2,3,4',6-TeCB	64	—	3.66	B J	U	0.532
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.78	B J	U	0.532
2,3',4,5-TeCB	67	—	—	U	—	0.532
2,3',4,5'-TeCB	68	—	72.5	—	R1	0.532
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.532
2,3',5',6-TeCB	73	—	—	U	—	0.532
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.709	K B J	U	0.532
3,3',4,5-TeCB	78	—	—	U	—	0.532
3,3',4,5'-TeCB	79	—	—	U	—	0.532
3,3',5,5'-TeCB	80	—	—	U	—	0.532
3,4,4',5-TeCB	81	—	—	U	—	0.532
2,2',3,3',4-PeCB	82	—	1.09	K J	U	0.716
2,2',3,3',5-PeCB	83	83 + 99	5.76	C B J	U	0.658
2,2',3,3',6-PeCB	84	—	2.89	K B J	U	0.771
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.13	C B J	U	0.532
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	7.42	C B J	U	0.556
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.69	C K B J	U	0.656
2,2',3,4,6'-PeCB	89	—	—	U	—	0.696
2,2',3,4',5-PeCB	90	90 + 101 + 113	9.00	C B J	U	0.57
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.65	K B J	U	0.68
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	8.42	C B J	U	0.635
2,2',3,5,6'-PeCB	94	—	—	U	—	0.706

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-2		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.532
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.57
2,2',4,6,6'-PeCB	104	—	—	U	—	0.532
2,3,3',4,4'-PeCB	105	—	2.81	B J	U	0.532
2,3,3',4,5-PeCB	106	—	—	U	—	0.532
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.532
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.757	B J	—	0.532
2,3,3',4',6-PeCB	110	110 + 115	11.4	C B J	U	0.532
2,3,3',5,5'-PeCB	111	—	—	U	—	0.532
2,3,3',5,6-PeCB	112	—	—	U	—	0.532
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.532
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.11	B J	U	0.532
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.532
2,3',4,5',6-PeCB	121	—	—	U	—	0.532
2',3,3',4,5-PeCB	122	—	—	U	—	0.532
2',3,4,4',5-PeCB	123	—	—	U	—	0.532
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.532
3,3',4,5,5'-PeCB	127	—	—	U	—	0.532
2,2',3,3',4,4'-HxCB	128	128 + 166	1.46	C B J	U	0.638
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	6.76	C B J	U	0.613
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.757
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.909
2,2',3,3',4,6'-HxCB	132	—	2.21	B J	U	0.91
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.794
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.901
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.39	C B J	U	0.633
2,2',3,3',6,6'-HxCB	136	—	0.900	K B J	U	0.532
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.712
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.804
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.989	J	—	0.685

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-2		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.873
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.642
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.543
2,2',3,4',5,5'-HxCB	146	—	1.15	J	—	0.682
2,2',3,4',5,6-HxCB	147	147 + 149	5.27	C B J	—	0.816
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.685
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.532
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.532
2,2',4,4',5,5'-HxCB	153	153 + 168	5.64	C B J	U	0.545
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.532
2,3,3',4,4',5-HxCB	156	156 + 157	0.966	C K J	U	0.76
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.716	J	—	0.532
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.556
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.532
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.593
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.532
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.632
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.536
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.552
2,2',3,3',4,4',5-HpCB	170	—	1.18	K B J	U	0.532
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.532
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.532
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	0.803	K B J	U	0.532
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.532
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.532
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	0.532
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.532
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.532
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.16	C K B J	U	0.532
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.532
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.532
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	0.532
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.532
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.532
2,2',3,4',5,5',6-HpCB	187	—	2.04	B J	U	0.532
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.532

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-2		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.532
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.532
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.532
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.532
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.792	K J	U	0.532
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.556
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.532
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.532
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.72	C K B J	U	0.532
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.532
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.532
2,2',3,4,4',5,5',6-OcCB	203	—	0.645	K J	U	0.532
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.532
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.532
2,2',3,3',4,4',5,5',6-NoCB	206	—	0.933	K J	U	0.837
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.65
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.689
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.57	B J	—	0.532
Total PCBs	—	—	61.5	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-2		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.10	B J	U	0.519
3-MoCB	2	—	2.17	B J	U	0.519
4-MoCB	3	—	5.51	K B J	U	0.519
2,2'-DiCB	4	—	1.94	K J	U	1.18
2,3-DiCB	5	—	—	U	—	1.09
2,3'-DiCB	6	—	—	U	—	0.94
2,4-DiCB	7	—	1.19	J	—	0.928
2,4'-DiCB	8	—	1.83	B J	U	0.845
2,5-DiCB	9	—	—	U	—	0.931
2,6-DiCB	10	—	—	U	—	0.909
3,3'-DiCB	11	—	11.2	B J	U	1.01
3,4-DiCB	12	12 + 13	—	C U	—	1.03
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.987
4,4'-DiCB	15	—	3.11	B J	U	1.17
2,2',3-TriCB	16	—	1.65	B J	—	0.519
2,2',4-TriCB	17	—	3.07	K J	U	0.519
2,2',5-TriCB	18	18 + 30	3.33	C B J	—	0.519
2,2',6-TriCB	19	—	1.77	J	—	0.519
2,3,3'-TriCB	20	20 + 28	6.86	C B J	U	0.519
2,3,4-TriCB	21	21 + 33	2.70	C B J	—	0.519
2,3,4'-TriCB	22	—	2.28	B J	U	0.519
2,3,5-TriCB	23	—	—	U	—	0.519
2,3,6-TriCB	24	—	—	U	—	0.519
2,3',4-TriCB	25	—	0.897	J	—	0.519
2,3',5-TriCB	26	26 + 29	0.925	C K J	U	0.519
2,3',6-TriCB	27	—	—	U	—	0.519
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.34	B J	U	0.519
2,4',6-TriCB	32	—	1.09	J	—	0.519
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.519
3,3',4-TriCB	35	—	—	U	—	0.519
3,3',5-TriCB	36	—	—	U	—	0.519
3,4,4'-TriCB	37	—	1.77	B J	—	0.519
3,4,5-TriCB	38	—	—	U	—	0.519
3,4',5-TriCB	39	—	—	U	—	0.519
2,2',3,3'-TeCB	40	40 + 41 + 71	2.58	C B J	U	0.531
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.17	K J	U	0.532
2,2',3,5-TeCB	43	—	—	U	—	0.525
2,2',3,5'-TeCB	44	44 + 47 + 65	137	C B	R1	0.519
2,2',3,6-TeCB	45	45 + 51	28.8	C	R1	0.519
2,2',3,6'-TeCB	46	—	—	U	—	0.519
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		KC Sample ID: L55284-2		Collection Date: 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.772	J	—	0.519
2,2',4,5'-TeCB	49	49 + 69	4.52	C B J	—	0.519
2,2',4,6-TeCB	50	50 + 53	0.570	C K J	U	0.519
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.32	B J	—	0.519
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.519
2,3,3',4-TeCB	55	—	—	U	—	0.63
2,3,3',4'-TeCB	56	—	2.03	B J	U	0.64
2,3,3',5-TeCB	57	—	—	U	—	0.611
2,3,3',5'-TeCB	58	—	—	U	—	0.604
2,3,3',6-TeCB	59	59 + 62 + 75	0.774	C K J	U	0.519
2,3,4,4'-TeCB	60	—	1.36	J	—	0.632
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.90	C B J	U	0.594
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.588
2,3,4',6-TeCB	64	—	2.99	B J	U	0.519
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.85	B J	U	0.588
2,3',4,5-TeCB	67	—	—	U	—	0.54
2,3',4,5'-TeCB	68	—	173	—	R1	0.612
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.605
2,3',5',6-TeCB	73	—	—	U	—	0.519
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.971	K B J	U	0.57
3,3',4,5-TeCB	78	—	—	U	—	0.611
3,3',4,5'-TeCB	79	—	—	U	—	0.519
3,3',5,5'-TeCB	80	—	—	U	—	0.561
3,4,4',5-TeCB	81	—	—	U	—	0.551
2,2',3,3',4-PeCB	82	—	—	U	—	0.903
2,2',3,3',5-PeCB	83	83 + 99	7.01	C K B J	U	0.805
2,2',3,3',6-PeCB	84	—	2.93	K B J	U	0.95
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.48	C B J	U	0.656
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.49	C K B J	U	0.688
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.46	C B J	U	0.798
2,2',3,4,6'-PeCB	89	—	—	U	—	0.86
2,2',3,4',5-PeCB	90	90 + 101 + 113	11.1	C B J	U	0.706
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.67	K B J	U	0.813
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	7.50	C B J	U	0.782
2,2',3,5,6'-PeCB	94	—	—	U	—	0.909

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-2		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.519
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.735
2,2',4,6,6'-PeCB	104	—	—	U	—	0.519
2,3,3',4,4'-PeCB	105	—	3.24	B J	U	0.551
2,3,3',4,5-PeCB	106	—	—	U	—	0.575
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.588
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.57
2,3,3',4',6-PeCB	110	110 + 115	10.0	C B J	U	0.583
2,3,3',5,5'-PeCB	111	—	—	U	—	0.571
2,3,3',5,6-PeCB	112	—	—	U	—	0.59
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.533	K J	U	0.529
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	6.92	B J	U	0.541
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.541
2,3',4,5',6-PeCB	121	—	—	U	—	0.597
2',3,3',4,5-PeCB	122	—	—	U	—	0.599
2',3,4,4',5-PeCB	123	—	—	U	—	0.551
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.647
3,3',4,5,5'-PeCB	127	—	—	U	—	0.519
2,2',3,3',4,4'-HxCB	128	128 + 166	1.62	C B J	U	0.656
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	7.46	C B J	U	0.64
2,2',3,3',4,5'-HxCB	130	—	—	U	—	0.802
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.892
2,2',3,3',4,6'-HxCB	132	—	2.67	B J	U	0.929
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.83
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.937
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.88	C K B J	U	0.724
2,2',3,3',6,6'-HxCB	136	—	0.851	K B J	U	0.569
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.744
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.808
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	0.912	K J	U	0.704

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-2		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.879
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.704
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.609
2,2',3,4',5,5'-HxCB	146	—	1.33	K J	U	0.685
2,2',3,4',5,6-HxCB	147	147 + 149	5.71	C B J	—	0.85
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.758
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.575
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.56
2,2',4,4',5,5'-HxCB	153	153 + 168	7.09	C B J	U	0.559
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.519
2,3,3',4,4',5-HxCB	156	156 + 157	0.927	C K J	U	0.808
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.519
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.567
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.559
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.592
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.539
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.634
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.556
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.59
2,2',3,3',4,4',5-HpCB	170	—	1.26	K B J	U	0.603
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.623
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.632
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.12	K B J	U	0.556
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.519
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.519
2,2',3,3',4',5,6-HpCB	177	—	0.970	K J	U	0.59
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.526
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.519
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.13	C B J	—	0.523
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.571
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.529
2,2',3,4,4',5',6-HpCB	183	183 + 185	0.571	C K J	U	0.527
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.519
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.519
2,2',3,4',5,5',6-HpCB	187	—	2.36	B J	U	0.519
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.519

Table B2-6. PCB Congener AXYS Analytical Data for Soos Creek (A320) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-2		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.519
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.519
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.519
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.519
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.863	K J	U	0.626
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.678
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.544
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.519
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.35	C K B J	U	0.55
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.519
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.519
2,2',3,4,4',5,5',6-OcCB	203	—	1.34	K J	U	0.519
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.519
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.519
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.01
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.765
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.796
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.74	K B J	U	0.519
Total PCBs	—	—	36.2	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726 **KC Sample ID:** L54090-3 **Collection Date:** 9/6/2011

Compound	IUPAC #	Coelutions	Conc. (pg/L)	Lab Qual	Val Qual	SDL (pg/L)
2-MoCB	1	—	2.31	B J	U	0.56
3-MoCB	2	—	0.963	K B J	U	0.56
4-MoCB	3	—	4.00	B J	U	0.56
2,2'-DiCB	4	—	2.20	J	—	1.42
2,3-DiCB	5	—	—	U	—	1.32
2,3'-DiCB	6	—	—	U	—	1.15
2,4-DiCB	7	—	3.08	B J	U	1.17
2,4'-DiCB	8	—	3.70	B J	U	1.05
2,5-DiCB	9	—	—	U	—	1.13
2,6-DiCB	10	—	—	U	—	1.11
3,3'-DiCB	11	—	12.6	B J	U	1.25
3,4-DiCB	12	12 + 13	—	C U	—	1.26
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.2
4,4'-DiCB	15	—	3.90	B J	U	1.16
2,2',3-TriCB	16	—	2.14	B J	U	0.56
2,2',4-TriCB	17	—	2.30	B J	U	0.56
2,2',5-TriCB	18	18 + 30	3.54	C B J	U	0.56
2,2',6-TriCB	19	—	1.27	J	—	0.56
2,3,3'-TriCB	20	20 + 28	6.45	C B J	U	0.56
2,3,4-TriCB	21	21 + 33	2.48	C B J	U	0.56
2,3,4'-TriCB	22	—	1.38	B J	U	0.56
2,3,5-TriCB	23	—	0.974	K J	U	0.56
2,3,6-TriCB	24	—	—	U	—	0.56
2,3',4-TriCB	25	—	—	U	—	0.56
2,3',5-TriCB	26	26 + 29	0.962	C J	—	0.56
2,3',6-TriCB	27	—	0.630	J	—	0.56
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.17	B J	U	0.56
2,4',6-TriCB	32	—	1.19	B J	U	0.56
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	0.656	K J	U	0.56
3,3',4-TriCB	35	—	—	U	—	0.56
3,3',5-TriCB	36	—	—	U	—	0.56
3,4,4'-TriCB	37	—	2.04	B J	U	0.56
3,4,5-TriCB	38	—	—	U	—	0.56
3,4',5-TriCB	39	—	—	U	—	0.56
2,2',3,3'-TeCB	40	40 + 41 + 71	2.69	C B J	U	0.56
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.55	B J	—	0.56
2,2',3,5-TeCB	43	—	—	U	—	0.56
2,2',3,5'-TeCB	44	44 + 47 + 65	21.6	C B J	R1	0.56
2,2',3,6-TeCB	45	45 + 51	6.26	C B J	R1	0.56
2,2',3,6'-TeCB	46	—	—	U	—	0.56
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-3		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.56
2,2',4,5'-TeCB	49	49 + 69	4.73	C B J	U	0.56
2,2',4,6-TeCB	50	50 + 53	1.10	C B J	U	0.56
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	9.10	B J	—	0.56
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	0.662	K J	U	0.56
2,3,3',4-TeCB	55	—	—	U	—	0.621
2,3,3',4'-TeCB	56	—	2.16	K B J	U	0.624
2,3,3',5-TeCB	57	—	—	U	—	0.6
2,3,3',5'-TeCB	58	—	—	U	—	0.6
2,3,3',6-TeCB	59	59 + 62 + 75	0.950	C J	—	0.56
2,3,4,4'-TeCB	60	—	0.704	B J	U	0.618
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	8.48	C B J	U	0.576
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.563
2,3,4',6-TeCB	64	—	1.97	K B J	U	0.56
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.71	K B J	U	0.565
2,3',4,5-TeCB	67	—	—	U	—	0.56
2,3',4,5'-TeCB	68	—	14.5	J	R1	0.56
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.56
2,3',5',6-TeCB	73	—	—	U	—	0.56
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.36	B J	U	0.56
3,3',4,5-TeCB	78	—	—	U	—	0.588
3,3',4,5'-TeCB	79	—	—	U	—	0.56
3,3',5,5'-TeCB	80	—	—	U	—	0.56
3,4,4',5-TeCB	81	—	0.883	K J	U	0.56
2,2',3,3',4-PeCB	82	—	1.81	B J	—	0.56
2,2',3,3',5-PeCB	83	83 + 99	7.21	C B J	—	0.56
2,2',3,3',6-PeCB	84	—	2.99	K B J	U	0.56
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.11	C B J	—	0.56
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	9.15	C B J	—	0.56
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.93	C B J	—	0.56
2,2',3,4,6'-PeCB	89	—	—	U	—	0.56
2,2',3,4',5-PeCB	90	90 + 101 + 113	12.2	C B J	U	0.56
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.99	K B J	U	0.56
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	11.1	C B J	U	0.56
2,2',3,5,6'-PeCB	94	—	—	U	—	0.56

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-3		**Collection Date:** 9/6/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.56
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.56
2,2',4,6,6'-PeCB	104	—	—	U	—	0.56
2,3,3',4,4'-PeCB	105	—	3.67	B J	U	0.56
2,3,3',4,5-PeCB	106	—	—	U	—	0.588
2,3,3',4',5-PeCB	107	107 + 124	0.966	C J	—	0.632
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.03	J	—	0.594
2,3,3',4',6-PeCB	110	110 + 115	14.8	C B J	U	0.56
2,3,3',5,5'-PeCB	111	—	—	U	—	0.56
2,3,3',5,6-PeCB	112	—	—	U	—	0.56
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.11	K J	U	0.56
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	8.89	B J	U	0.56
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.56
2,3',4,5',6-PeCB	121	—	—	U	—	0.56
2',3,3',4,5-PeCB	122	—	—	U	—	0.657
2',3,4,4',5-PeCB	123	—	1.21	K J	U	0.56
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.28	J	—	0.608
3,3',4,5,5'-PeCB	127	—	—	U	—	0.603
2,2',3,3',4,4'-HxCB	128	128 + 166	2.71	C J	—	0.56
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	12.5	C B J	—	0.56
2,2',3,3',4,5'-HxCB	130	—	1.24	K B J	U	0.56
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.56
2,2',3,3',4,6'-HxCB	132	—	3.95	J	—	0.56
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.56
2,2',3,3',5,6-HxCB	134	134 + 143	1.31	C K J	U	0.56
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.97	C K J	U	0.56
2,2',3,3',6,6'-HxCB	136	—	1.81	K J	U	0.56
2,2',3,4,4',5-HxCB	137	—	0.597	K J	U	0.56
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.56
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.37	J	—	0.56

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-3		**Collection Date:** 9/6/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.56
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.572	K J	U	0.56
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.56
2,2',3,4',5,5'-HxCB	146	—	2.20	K J	U	0.56
2,2',3,4',5,6-HxCB	147	147 + 149	12.0	C B J	—	0.56
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.56
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.56
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.56
2,2',4,4',5,5'-HxCB	153	153 + 168	11.3	C K B J	U	0.56
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.56
2,3,3',4,4',5-HxCB	156	156 + 157	3.25	C B J	—	0.56
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.69	K J	U	0.56
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.56
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.56
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.56
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.09	J	—	0.56
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.56
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.19	K J	U	0.56
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	1.46	J	—	0.56
2,2',3,3',4,4',5-HpCB	170	—	2.35	K B J	U	0.56
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.07	C K J	U	0.56
2,2',3,3',4,5,5'-HpCB	172	—	0.570	K J	U	0.56
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.91	K B J	U	0.56
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.56
2,2',3,3',4,6,6'-HpCB	176	—	0.584	K J	U	0.56
2,2',3,3',4',5,6-HpCB	177	—	2.10	K J	U	0.56
2,2',3,3',5,5',6-HpCB	178	—	0.962	K J	U	0.56
2,2',3,3',5,6,6'-HpCB	179	—	1.71	J	—	0.56
2,2',3,4,4',5,5'-HpCB	180	180 + 193	7.04	C K B J	U	0.56
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.56
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.56
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.56	C B J	—	0.56
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.56
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.56
2,2',3,4',5,5',6-HpCB	187	—	5.79	B J	U	0.56
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.56

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54090-3		**Collection Date:**	9/6/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.604	K J	U	0.56
2,3,3',4,4',5,6-HpCB	190	—	0.630	K J	U	0.56
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.56
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.56
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.79	K B J	U	0.56
2,2',3,3',4,4',5,6-OcCB	195	—	1.00	K J	U	0.56
2,2',3,3',4,4',5,6'-OcCB	196	—	1.09	K J	U	0.56
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.27	C K J	U	0.56
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	3.77	C B J	—	0.56
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.810	K J	U	0.56
2,2',3,3',5,5',6,6'-OcCB	202	—	0.906	K J	U	0.56
2,2',3,4,4',5,5',6-OcCB	203	—	1.90	K B J	U	0.56
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.56
2,3,3',4,4',5,5',6-OcCB	205	—	0.873	J	—	0.56
2,2',3,3',4,4',5,5',6-NoCB	206	—	8.96	J	—	0.697
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.617
2,2',3,3',4,5,5',6,6'-NoCB	208	—	4.61	J	—	0.594
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	13.8	B J	—	0.56
Total PCBs	—	—	118	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54117-3		Collection Date: 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.52	B J	U	0.555
3-MoCB	2	—	1.00	B J	U	0.555
4-MoCB	3	—	2.33	B J	U	0.555
2,2'-DiCB	4	—	1.94	J	—	1.83
2,3-DiCB	5	—	—	U	—	1.63
2,3'-DiCB	6	—	—	U	—	1.47
2,4-DiCB	7	—	1.51	B J	U	1.5
2,4'-DiCB	8	—	3.83	B J	U	1.35
2,5-DiCB	9	—	—	U	—	1.43
2,6-DiCB	10	—	—	U	—	1.42
3,3'-DiCB	11	—	12.90	B J	U	1.55
3,4-DiCB	12	12 + 13	—	C U	—	1.58
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.52
4,4'-DiCB	15	—	2.37	B J	U	1.49
2,2',3-TriCB	16	—	1.94	K B J	U	0.555
2,2',4-TriCB	17	—	2.33	K B J	U	0.555
2,2',5-TriCB	18	18 + 30	4.41	C B J	U	0.555
2,2',6-TriCB	19	—	0.877	J	—	0.555
2,3,3'-TriCB	20	20 + 28	5.65	C B J	U	0.555
2,3,4-TriCB	21	21 + 33	2.11	C B J	U	0.555
2,3,4'-TriCB	22	—	1.74	B J	U	0.555
2,3,5-TriCB	23	—	—	U	—	0.555
2,3,6-TriCB	24	—	—	U	—	0.555
2,3',4-TriCB	25	—	—	U	—	0.555
2,3',5-TriCB	26	26 + 29	0.806	C J	—	0.555
2,3',6-TriCB	27	—	—	U	—	0.555
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.72	B J	U	0.555
2,4',6-TriCB	32	—	1.53	B J	U	0.555
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.555
3,3',4-TriCB	35	—	—	U	—	0.555
3,3',5-TriCB	36	—	—	U	—	0.555
3,4,4'-TriCB	37	—	1.12	B J	U	0.555
3,4,5-TriCB	38	—	—	U	—	0.555
3,4',5-TriCB	39	—	—	U	—	0.555
2,2',3,3'-TeCB	40	40 + 41 + 71	2.70	C B J	U	0.555
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.831	K B J	U	0.555
2,2',3,5-TeCB	43	—	—	U	—	0.555
2,2',3,5'-TeCB	44	44 + 47 + 65	14.80	C B J	R1	0.555
2,2',3,6-TeCB	45	45 + 51	4.92	C K B J	U, R1	0.555
2,2',3,6'-TeCB	46	—	—	U	—	0.555
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-3		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.555
2,2',4,5'-TeCB	49	49 + 69	3.71	C B J	U	0.555
2,2',4,6-TeCB	50	50 + 53	1.06	C B J	U	0.555
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.72	B J	—	0.555
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.555
2,3,3',4-TeCB	55	—	—	U	—	0.611
2,3,3',4'-TeCB	56	—	1.35	B J	—	0.594
2,3,3',5-TeCB	57	—	—	U	—	0.567
2,3,3',5'-TeCB	58	—	—	U	—	0.583
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.555
2,3,4,4'-TeCB	60	—	—	U	—	0.591
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	7.93	C B J	U	0.557
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.555
2,3,4',6-TeCB	64	—	1.95	B J	—	0.555
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.14	B J	U	0.555
2,3',4,5-TeCB	67	—	—	U	—	0.555
2,3',4,5'-TeCB	68	—	10.00	J	R1	0.555
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.555
2,3',5',6-TeCB	73	—	—	U	—	0.555
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.555
3,3',4,5-TeCB	78	—	—	U	—	0.585
3,3',4,5'-TeCB	79	—	—	U	—	0.555
3,3',5,5'-TeCB	80	—	—	U	—	0.555
3,4,4',5-TeCB	81	—	—	U	—	0.555
2,2',3,3',4-PeCB	82	—	1.26	K B J	U	0.555
2,2',3,3',5-PeCB	83	83 + 99	4.87	C B J	—	0.555
2,2',3,3',6-PeCB	84	—	3.66	B J	U	0.555
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.93	C K B J	U	0.555
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	7.15	C B J	—	0.555
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.71	C K B J	U	0.555
2,2',3,4,6'-PeCB	89	—	—	U	—	0.555
2,2',3,4',5-PeCB	90	90 + 101 + 113	11.00	C K B J	U	0.555
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.75	K B J	U	0.555
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	10.40	C B J	U	0.555
2,2',3,5,6'-PeCB	94	—	—	U	—	0.555

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-3		**Collection Date:** 9/7/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.555
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.555
2,2',4,6,6'-PeCB	104	—	—	U	—	0.555
2,3,3',4,4'-PeCB	105	—	3.77	B J	U	0.555
2,3,3',4,5-PeCB	106	—	—	U	—	0.555
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.555
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.748	K J	U	0.555
2,3,3',4',6-PeCB	110	110 + 115	13.70	C B J	U	0.555
2,3,3',5,5'-PeCB	111	—	—	U	—	0.555
2,3,3',5,6-PeCB	112	—	—	U	—	0.555
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.555
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.62	B J	U	0.555
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.555
2,3',4,5',6-PeCB	121	—	—	U	—	0.555
2',3,3',4,5-PeCB	122	—	—	U	—	0.555
2',3,4,4',5-PeCB	123	—	—	U	—	0.555
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.555
3,3',4,5,5'-PeCB	127	—	—	U	—	0.555
2,2',3,3',4,4'-HxCB	128	128 + 166	3.56	C K J	U	0.555
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	14.30	C K B J	U	0.555
2,2',3,3',4,5'-HxCB	130	—	1.30	K B J	U	0.555
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.555
2,2',3,3',4,6'-HxCB	132	—	5.68	J	—	0.555
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.555
2,2',3,3',5,6-HxCB	134	134 + 143	0.770	C K J	U	0.555
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.41	C J	—	0.555
2,2',3,3',6,6'-HxCB	136	—	1.38	K J	U	0.555
2,2',3,4,4',5-HxCB	137	—	0.608	K J	U	0.555
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.555
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.54	K J	U	0.555

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-3		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.555
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.555	K J	U	0.555
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.555
2,2',3,4',5,5'-HxCB	146	—	1.96	K J	U	0.555
2,2',3,4',5,6-HxCB	147	147 + 149	9.96	C B J	U	0.555
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.555
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.555
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.555
2,2',4,4',5,5'-HxCB	153	153 + 168	11.10	C B J	—	0.555
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.555
2,3,3',4,4',5-HxCB	156	156 + 157	1.74	C B J	—	0.555
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.18	J	—	0.555
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.555
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.555
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.555
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.40	K J	U	0.555
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.555
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.633	K J	U	0.555
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.555
2,2',3,3',4,4',5-HpCB	170	—	3.25	B J	—	0.555
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.990	C J	—	0.555
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.555
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.63	B J	—	0.555
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.555
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.555
2,2',3,3',4',5,6-HpCB	177	—	1.38	J	—	0.555
2,2',3,3',5,5',6-HpCB	178	—	0.990	J	—	0.555
2,2',3,3',5,6,6'-HpCB	179	—	1.21	J	—	0.555
2,2',3,4,4',5,5'-HpCB	180	180 + 193	6.48	C B J	—	0.555
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.555
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.555
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.63	C B J	—	0.555
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.555
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.555
2,2',3,4',5,5',6-HpCB	187	—	4.40	B J	U	0.555
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.555

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54117-3		**Collection Date:**	9/7/2011	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.555
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.555
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.555
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.555
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.17	B J	—	0.555
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.555
2,2',3,3',4,4',5,6'-OcCB	196	—	1.03	J	—	0.555
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.555
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.40	C B J	—	0.555
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.555
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.555
2,2',3,4,4',5,5',6-OcCB	203	—	1.31	B J	—	0.555
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.555
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.555
2,2',3,3',4,4',5,5',6-NoCB	206	—	4.94	J	—	0.937
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.8
2,2',3,3',4,5,5',6,6'-NoCB	208	—	2.01	J	—	0.781
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	6.82	B J	—	0.555
Total PCBs	—	—	91.0	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-3		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.60	B J	U	0.577
3-MoCB	2	—	1.65	B J	U	0.577
4-MoCB	3	—	2.94	K B J	U	0.577
2,2'-DiCB	4	—	—	U	—	2.31
2,3-DiCB	5	—	—	U	—	2.3
2,3'-DiCB	6	—	—	U	—	2.07
2,4-DiCB	7	—	—	U	—	2.1
2,4'-DiCB	8	—	3.01	B J	U	1.9
2,5-DiCB	9	—	—	U	—	2.02
2,6-DiCB	10	—	—	U	—	1.99
3,3'-DiCB	11	—	17.0	B J	U	2.18
3,4-DiCB	12	12 + 13	—	C U	—	2.22
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.13
4,4'-DiCB	15	—	2.44	B J	U	2.23
2,2',3-TriCB	16	—	1.64	K B J	U	0.577
2,2',4-TriCB	17	—	1.79	B J	U	0.577
2,2',5-TriCB	18	18 + 30	3.51	C K B J	U	0.577
2,2',6-TriCB	19	—	—	U	—	0.577
2,3,3'-TriCB	20	20 + 28	5.66	C B J	U	0.621
2,3,4-TriCB	21	21 + 33	2.16	C K B J	U	0.594
2,3,4'-TriCB	22	—	1.40	B J	U	0.662
2,3,5-TriCB	23	—	—	U	—	0.642
2,3,6-TriCB	24	—	—	U	—	0.577
2,3',4-TriCB	25	—	—	U	—	0.577
2,3',5-TriCB	26	26 + 29	0.728	C J	—	0.622
2,3',6-TriCB	27	—	—	U	—	0.577
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.60	B J	U	0.577
2,4',6-TriCB	32	—	1.07	K B J	U	0.579
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.642
3,3',4-TriCB	35	—	—	U	—	0.673
3,3',5-TriCB	36	—	—	U	—	0.611
3,4,4'-TriCB	37	—	1.43	B J	U	0.677
3,4,5-TriCB	38	—	—	U	—	0.6
3,4',5-TriCB	39	—	—	U	—	0.618
2,2',3,3'-TeCB	40	40 + 41 + 71	2.94	C K B J	U	0.577
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.31	B J	—	0.577
2,2',3,5-TeCB	43	—	—	U	—	0.595
2,2',3,5'-TeCB	44	44 + 47 + 65	32.7	C B	R1	0.577
2,2',3,6-TeCB	45	45 + 51	16.1	C B J	R1	0.577
2,2',3,6'-TeCB	46	—	—	U	—	0.577
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-3		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.11	K B J	U	0.577
2,2',4,5'-TeCB	49	49 + 69	5.33	C B J	U	0.577
2,2',4,6-TeCB	50	50 + 53	1.53	C B J	U	0.577
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	10.1	B J	—	0.577
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.577
2,3,3',4-TeCB	55	—	—	U	—	0.92
2,3,3',4'-TeCB	56	—	2.12	K B J	U	0.894
2,3,3',5-TeCB	57	—	—	U	—	0.854
2,3,3',5'-TeCB	58	—	—	U	—	0.878
2,3,3',6-TeCB	59	59 + 62 + 75	0.648	C K J	U	0.577
2,3,4,4'-TeCB	60	—	—	U	—	0.889
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.46	C B J	U	0.839
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.815
2,3,4',6-TeCB	64	—	2.31	K B J	U	0.577
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.93	K B J	U	0.816
2,3',4,5-TeCB	67	—	—	U	—	0.75
2,3',4,5'-TeCB	68	—	23.9	—	R1	0.809
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.812
2,3',5',6-TeCB	73	—	—	U	—	0.577
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.787
3,3',4,5-TeCB	78	—	—	U	—	0.881
3,3',4,5'-TeCB	79	—	—	U	—	0.715
3,3',5,5'-TeCB	80	—	—	U	—	0.788
3,4,4',5-TeCB	81	—	—	U	—	0.776
2,2',3,3',4-PeCB	82	—	1.58	K B J	U	0.577
2,2',3,3',5-PeCB	83	83 + 99	6.92	C B J	—	0.577
2,2',3,3',6-PeCB	84	—	4.12	B J	U	0.577
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.76	C B J	—	0.577
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	9.37	C B J	—	0.577
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.51	C B J	—	0.577
2,2',3,4,6'-PeCB	89	—	—	U	—	0.577
2,2',3,4',5-PeCB	90	90 + 101 + 113	14.6	C B J	U	0.577
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.98	K B J	U	0.577
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	13.4	C B J	U	0.577
2,2',3,5,6'-PeCB	94	—	—	U	—	0.577

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-3		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.577
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.577
2,2',4,6,6'-PeCB	104	—	—	U	—	0.577
2,3,3',4,4'-PeCB	105	—	5.09	B J	U	0.658
2,3,3',4,5-PeCB	106	—	—	U	—	0.69
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.721
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.701
2,3,3',4',6-PeCB	110	110 + 115	20.3	C B J	U	0.577
2,3,3',5,5'-PeCB	111	—	—	U	—	0.577
2,3,3',5,6-PeCB	112	—	—	U	—	0.577
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.639
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	8.52	B J	U	0.604
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.577
2,3',4,5',6-PeCB	121	—	—	U	—	0.577
2',3,3',4,5-PeCB	122	—	—	U	—	0.756
2',3,4,4',5-PeCB	123	—	—	U	—	0.609
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.741
3,3',4,5,5'-PeCB	127	—	—	U	—	0.709
2,2',3,3',4,4'-HxCB	128	128 + 166	5.01	C J	—	0.577
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	19.8	C B J	—	0.577
2,2',3,3',4,5'-HxCB	130	—	1.36	K B J	U	0.632
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.615
2,2',3,3',4,6'-HxCB	132	—	7.32	K J	U	0.637
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.587
2,2',3,3',5,6-HxCB	134	134 + 143	0.681	C J	—	0.599
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	7.36	C J	—	0.577
2,2',3,3',6,6'-HxCB	136	—	1.30	K J	U	0.577
2,2',3,4,4',5-HxCB	137	—	1.20	J	—	0.623
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.721	C J	—	0.577
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.09	J	—	0.577

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-3		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.603
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.577
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.577
2,2',3,4',5,5'-HxCB	146	—	2.82	K J	U	0.577
2,2',3,4',5,6-HxCB	147	147 + 149	13.2	C B J	—	0.577
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.577
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.577
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.577
2,2',4,4',5,5'-HxCB	153	153 + 168	12.7	C B J	—	0.577
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.577
2,3,3',4,4',5-HxCB	156	156 + 157	2.00	C B J	—	0.577
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.37	K J	U	0.577
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.577
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.577
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.577
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.13	K J	U	0.577
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.577
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.00	K J	U	0.577
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.577
2,2',3,3',4,4',5-HpCB	170	—	3.39	B J	—	0.577
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.740	C K J	U	0.577
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.577
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	4.00	B J	—	0.577
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.577
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.577
2,2',3,3',4',5,6-HpCB	177	—	2.12	K J	U	0.577
2,2',3,3',5,5',6-HpCB	178	—	0.848	K J	U	0.577
2,2',3,3',5,6,6'-HpCB	179	—	1.22	K J	U	0.577
2,2',3,4,4',5,5'-HpCB	180	180 + 193	6.31	C B J	—	0.577
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.577
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.577
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.80	C K B J	U	0.577
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.577
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.577
2,2',3,4',5,5',6-HpCB	187	—	5.21	B J	U	0.577
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.577

Table B2-7. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54125-3		**Collection Date:** 9/12/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.577
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.577
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.577
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.577
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.51	K B J	U	0.577
2,2',3,3',4,4',5,6-OcCB	195	—	0.937	K J	U	0.577
2,2',3,3',4,4',5,6'-OcCB	196	—	1.30	J	—	0.577
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.577
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.75	C B J	—	0.577
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.577
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.577
2,2',3,4,4',5,5',6-OcCB	203	—	1.64	B J	—	0.577
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.577
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.577
2,2',3,3',4,4',5,5',6-NoCB	206	—	2.60	J	—	1.34
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.12
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.25	K J	U	1.08
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	4.39	B J	U	0.577
Total PCBs	—	—	121	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-3		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.77	B J	U	0.521
3-MoCB	2	—	3.38	B J	U	0.521
4-MoCB	3	—	9.46	B J	U	0.521
2,2'-DiCB	4	—	—	U	—	4.68
2,3-DiCB	5	—	—	U	—	3.67
2,3'-DiCB	6	—	—	U	—	3.33
2,4-DiCB	7	—	—	U	—	3.47
2,4'-DiCB	8	—	—	U	—	3.19
2,5-DiCB	9	—	—	U	—	3.24
2,6-DiCB	10	—	—	U	—	3.36
3,3'-DiCB	11	—	6.35	B J	—	3.59
3,4-DiCB	12	12 + 13	—	C U	—	3.63
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	3.41
4,4'-DiCB	15	—	5.42	B J	U	3.79
2,2',3-TriCB	16	—	0.881	K J	U	0.793
2,2',4-TriCB	17	—	11.3	J	—	0.64
2,2',5-TriCB	18	18 + 30	2.76	C B J	—	0.537
2,2',6-TriCB	19	—	0.727	K J	U	0.541
2,3,3'-TriCB	20	20 + 28	4.90	C B J	U	0.521
2,3,4-TriCB	21	21 + 33	1.86	C B J	U	0.521
2,3,4'-TriCB	22	—	0.797	B J	—	0.521
2,3,5-TriCB	23	—	—	U	—	0.521
2,3,6-TriCB	24	—	—	U	—	0.521
2,3',4-TriCB	25	—	1.81	J	—	0.521
2,3',5-TriCB	26	26 + 29	0.543	C K J	U	0.521
2,3',6-TriCB	27	—	—	U	—	0.521
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.07	B J	U	0.521
2,4',6-TriCB	32	—	0.620	K J	U	0.521
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.521
3,3',4-TriCB	35	—	—	U	—	0.521
3,3',5-TriCB	36	—	—	U	—	0.521
3,4,4'-TriCB	37	—	0.879	J	—	0.521
3,4,5-TriCB	38	—	—	U	—	0.521
3,4',5-TriCB	39	—	—	U	—	0.521
2,2',3,3'-TeCB	40	40 + 41 + 71	1.86	C J	—	0.807
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.843
2,2',3,5-TeCB	43	—	—	U	—	0.982
2,2',3,5'-TeCB	44	44 + 47 + 65	164	C B	R1	0.74
2,2',3,6-TeCB	45	45 + 51	31.8	C	R1	0.8
2,2',3,6'-TeCB	46	—	—	U	—	0.922
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-3		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.830	K J	U	0.811
2,2',4,5'-TeCB	49	49 + 69	4.83	C B J	—	0.691
2,2',4,6-TeCB	50	50 + 53	0.907	C K J	U	0.778
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.81	B J	U	0.739
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.521
2,3,3',4-TeCB	55	—	—	U	—	0.94
2,3,3',4'-TeCB	56	—	—	U	—	0.911
2,3,3',5-TeCB	57	—	—	U	—	0.89
2,3,3',5'-TeCB	58	—	—	U	—	0.887
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.615
2,3,4,4'-TeCB	60	—	—	U	—	0.922
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	5.28	C B J	—	0.878
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.835
2,3,4',6-TeCB	64	—	1.42	B J	U	0.591
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.77	B J	U	0.82
2,3',4,5-TeCB	67	—	—	U	—	0.783
2,3',4,5'-TeCB	68	—	115	—	R1	0.864
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.846
2,3',5',6-TeCB	73	—	—	U	—	0.598
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.847
3,3',4,5-TeCB	78	—	—	U	—	0.876
3,3',4,5'-TeCB	79	—	—	U	—	0.742
3,3',5,5'-TeCB	80	—	—	U	—	0.802
3,4,4',5-TeCB	81	—	—	U	—	0.833
2,2',3,3',4-PeCB	82	—	—	U	—	0.521
2,2',3,3',5-PeCB	83	83 + 99	6.37	C B J	—	0.521
2,2',3,3',6-PeCB	84	—	1.77	K J	U	0.529
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.73	C K J	U	0.521
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.45	C B J	—	0.521
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.66	C J	—	0.521
2,2',3,4,6'-PeCB	89	—	—	U	—	0.521
2,2',3,4',5-PeCB	90	90 + 101 + 113	10.7	C B J	—	0.521
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.97	J	—	0.521
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	9.07	C B J	—	0.521
2,2',3,5,6'-PeCB	94	—	—	U	—	0.521

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-3		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.521
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.521
2,2',4,6,6'-PeCB	104	—	—	U	—	0.521
2,3,3',4,4'-PeCB	105	—	3.42	B J	—	0.521
2,3,3',4,5-PeCB	106	—	—	U	—	0.521
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.521
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.589	K J	U	0.521
2,3,3',4',6-PeCB	110	110 + 115	11.8	C B J	—	0.521
2,3,3',5,5'-PeCB	111	—	—	U	—	0.521
2,3,3',5,6-PeCB	112	—	—	U	—	0.521
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.521
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.72	B J	—	0.521
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.521
2,3',4,5',6-PeCB	121	—	—	U	—	0.521
2',3,3',4,5-PeCB	122	—	—	U	—	0.521
2',3,4,4',5-PeCB	123	—	—	U	—	0.521
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.521
3,3',4,5,5'-PeCB	127	—	—	U	—	0.521
2,2',3,3',4,4'-HxCB	128	128 + 166	2.55	C J	—	0.521
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	15.3	C B J	—	0.521
2,2',3,3',4,5'-HxCB	130	—	1.04	J	—	0.521
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.521
2,2',3,3',4,6'-HxCB	132	—	4.85	J	—	0.521
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.521
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.521
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.06	C B J	—	0.521
2,2',3,3',6,6'-HxCB	136	—	1.32	J	—	0.521
2,2',3,4,4',5-HxCB	137	—	1.06	K J	U	0.521
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.521
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.58	J	—	0.521

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-3		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.521
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.521
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.521
2,2',3,4',5,5'-HxCB	146	—	2.35	J	—	0.521
2,2',3,4',5,6-HxCB	147	147 + 149	10.5	C B J	—	0.521
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.521
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.521
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.521
2,2',4,4',5,5'-HxCB	153	153 + 168	13.3	C B J	—	0.521
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.521
2,3,3',4,4',5-HxCB	156	156 + 157	1.40	C J	—	0.521
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.46	K J	U	0.521
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.521
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.521
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.521
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.988	K J	U	0.521
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.521
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.608	J	—	0.521
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.521
2,2',3,3',4,4',5-HpCB	170	—	3.65	K J	U	0.521
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.587	C J	—	0.521
2,2',3,3',4,5,5'-HpCB	172	—	0.761	K J	U	0.521
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.48	K J	U	0.521
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.521
2,2',3,3',4,6,6'-HpCB	176	—	0.602	J	—	0.521
2,2',3,3',4',5,6-HpCB	177	—	1.99	K J	U	0.521
2,2',3,3',5,5',6-HpCB	178	—	1.11	J	—	0.521
2,2',3,3',5,6,6'-HpCB	179	—	1.53	J	—	0.521
2,2',3,4,4',5,5'-HpCB	180	180 + 193	7.78	C J	—	0.521
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.521
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.521
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.59	C J	—	0.521
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.521
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.521
2,2',3,4',5,5',6-HpCB	187	—	5.46	B J G	—	0.521
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.521

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-3		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.521
2,3,3',4,4',5,6-HpCB	190	—	0.688	J	—	0.521
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.521
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.521
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	2.06	J	—	0.521
2,2',3,3',4,4',5,6-OcCB	195	—	0.958	K J	U	0.521
2,2',3,3',4,4',5,6'-OcCB	196	—	1.34	J	—	0.521
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.598	C K J	U	0.521
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	3.26	C J	—	0.521
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.521
2,2',3,3',5,5',6,6'-OcCB	202	—	1.11	K J	U	0.521
2,2',3,4,4',5,5',6-OcCB	203	—	2.66	J	—	0.521
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.521
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.521
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.82
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.2
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.4
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.92	B J	—	0.521
Total PCBs	—	—	187	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-3		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.43	B J	U	0.552
3-MoCB	2	—	3.16	B J	U	0.552
4-MoCB	3	—	8.72	B J	U	0.552
2,2'-DiCB	4	—	—	U	—	3.64
2,3-DiCB	5	—	—	U	—	2.91
2,3'-DiCB	6	—	—	U	—	2.64
2,4-DiCB	7	—	—	U	—	2.75
2,4'-DiCB	8	—	—	U	—	2.53
2,5-DiCB	9	—	—	U	—	2.57
2,6-DiCB	10	—	—	U	—	2.67
3,3'-DiCB	11	—	9.52	B J	—	2.84
3,4-DiCB	12	12 + 13	—	C U	—	2.88
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.71
4,4'-DiCB	15	—	4.99	B J	U	3.05
2,2',3-TriCB	16	—	1.04	K J	U	0.854
2,2',4-TriCB	17	—	6.55	J	—	0.69
2,2',5-TriCB	18	18 + 30	2.27	C B J	—	0.579
2,2',6-TriCB	19	—	0.647	J	—	0.589
2,3,3'-TriCB	20	20 + 28	4.88	C B J	U	0.552
2,3,4-TriCB	21	21 + 33	10.1	C B J	—	0.552
2,3,4'-TriCB	22	—	0.892	B J	—	0.552
2,3,5-TriCB	23	—	—	U	—	0.552
2,3,6-TriCB	24	—	—	U	—	0.552
2,3',4-TriCB	25	—	2.26	J	—	0.552
2,3',5-TriCB	26	26 + 29	—	C U	—	0.552
2,3',6-TriCB	27	—	—	U	—	0.552
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.45	B J	U	0.552
2,4',6-TriCB	32	—	0.869	J	—	0.552
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.552
3,3',4-TriCB	35	—	—	U	—	0.552
3,3',5-TriCB	36	—	—	U	—	0.552
3,4,4'-TriCB	37	—	0.796	J	—	0.552
3,4,5-TriCB	38	—	—	U	—	0.552
3,4',5-TriCB	39	—	—	U	—	0.552
2,2',3,3'-TeCB	40	40 + 41 + 71	2.02	C K J	U	0.74
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.32	K J	U	0.773
2,2',3,5-TeCB	43	—	—	U	—	0.9
2,2',3,5'-TeCB	44	44 + 47 + 65	1040	C B	R1	0.679
2,2',3,6-TeCB	45	45 + 51	250	C	R1	0.733
2,2',3,6'-TeCB	46	—	—	U	—	0.846
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-3		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.744
2,2',4,5'-TeCB	49	49 + 69	18.8	C B J	—	0.634
2,2',4,6-TeCB	50	50 + 53	0.783	C K J	U	0.713
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	5.57	B J	U	0.677
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.552
2,3,3',4-TeCB	55	—	—	U	—	1.32
2,3,3',4'-TeCB	56	—	1.29	K J	U	1.28
2,3,3',5-TeCB	57	—	—	U	—	1.25
2,3,3',5'-TeCB	58	—	—	U	—	1.25
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.564
2,3,4,4'-TeCB	60	—	—	U	—	1.29
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	5.67	C B J	—	1.23
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.17
2,3,4',6-TeCB	64	—	1.46	K B J	U	0.552
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.08	B J	—	1.15
2,3',4,5-TeCB	67	—	—	U	—	1.1
2,3',4,5'-TeCB	68	—	381	—	R1	1.21
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.19
2,3',5',6-TeCB	73	—	—	U	—	0.552
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.21
3,3',4,5-TeCB	78	—	—	U	—	1.23
3,3',4,5'-TeCB	79	—	—	U	—	1.04
3,3',5,5'-TeCB	80	—	—	U	—	1.13
3,4,4',5-TeCB	81	—	—	U	—	1.16
2,2',3,3',4-PeCB	82	—	1.09	J	—	0.552
2,2',3,3',5-PeCB	83	83 + 99	9.76	C B J	—	0.552
2,2',3,3',6-PeCB	84	—	1.58	J	—	0.552
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.73	C J	—	0.552
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.34	C B J	—	0.552
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.95	C J	—	0.552
2,2',3,4,6'-PeCB	89	—	—	U	—	0.552
2,2',3,4',5-PeCB	90	90 + 101 + 113	12.7	C B J	—	0.552
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.73	K J	U	0.552
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	6.95	C K B J	U	0.552
2,2',3,5,6'-PeCB	94	—	—	U	—	0.552

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-3		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.552
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.552
2,2',4,6,6'-PeCB	104	—	—	U	—	0.552
2,3,3',4,4'-PeCB	105	—	3.97	K B J	U	0.552
2,3,3',4,5-PeCB	106	—	—	U	—	0.552
2,3,3',4',5-PeCB	107	107 + 124	0.675	C J	—	0.552
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.736	J	—	0.552
2,3,3',4',6-PeCB	110	110 + 115	10.7	C B J	—	0.552
2,3,3',5,5'-PeCB	111	—	—	U	—	0.552
2,3,3',5,6-PeCB	112	—	—	U	—	0.552
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.552
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	9.57	B J	—	0.552
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.552
2,3',4,5',6-PeCB	121	—	—	U	—	0.552
2',3,3',4,5-PeCB	122	—	—	U	—	0.552
2',3,4,4',5-PeCB	123	—	—	U	—	0.552
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.552
3,3',4,5,5'-PeCB	127	—	—	U	—	0.552
2,2',3,3',4,4'-HxCB	128	128 + 166	3.10	C K J	U	0.552
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	20.1	C B J	—	0.552
2,2',3,3',4,5'-HxCB	130	—	1.01	K J	U	0.552
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.552
2,2',3,3',4,6'-HxCB	132	—	5.25	J	—	0.552
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.552
2,2',3,3',5,6-HxCB	134	134 + 143	0.556	C K J	U	0.552
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.07	C K B J	U	0.552
2,2',3,3',6,6'-HxCB	136	—	1.43	J	—	0.552
2,2',3,4,4',5-HxCB	137	—	1.39	K J	U	0.552
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.974	C K J	U	0.552
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.61	J	—	0.552

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-3		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.552
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.622	J	—	0.552
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.552
2,2',3,4',5,5'-HxCB	146	—	2.77	J	—	0.552
2,2',3,4',5,6-HxCB	147	147 + 149	11.3	C B J	—	0.552
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.552
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.552
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.552
2,2',4,4',5,5'-HxCB	153	153 + 168	19.9	C B J	—	0.552
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.552
2,3,3',4,4',5-HxCB	156	156 + 157	1.90	C J	—	0.552
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.57	K J	U	0.552
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.552
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.552
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.552
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.15	J	—	0.552
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.552
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.01	J	—	0.552
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.552
2,2',3,3',4,4',5-HpCB	170	—	4.54	J	—	0.552
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.994	C J	—	0.552
2,2',3,3',4,5,5'-HpCB	172	—	1.16	K J	U	0.552
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	4.32	K J	U	0.552
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.552
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.552
2,2',3,3',4',5,6-HpCB	177	—	2.85	J	—	0.552
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.552
2,2',3,3',5,6,6'-HpCB	179	—	1.84	J	—	0.552
2,2',3,4,4',5,5'-HpCB	180	180 + 193	11.8	C J	—	0.552
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.552
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.552
2,2',3,4,4',5',6-HpCB	183	183 + 185	3.24	C K J	U	0.552
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.552
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.552
2,2',3,4',5,5',6-HpCB	187	—	5.86	B J	—	0.552
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.552

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-3		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.552
2,3,3',4,4',5,6-HpCB	190	—	1.18	J	—	0.552
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.552
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.552
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.39	K J	U	0.552
2,2',3,3',4,4',5,6-OcCB	195	—	1.10	K J	U	0.552
2,2',3,3',4,4',5,6'-OcCB	196	—	1.51	J	—	0.552
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.582	C J	—	0.552
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.15	C J	—	0.552
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.552
2,2',3,3',5,5',6,6'-OcCB	202	—	0.943	J	—	0.552
2,2',3,4,4',5,5',6-OcCB	203	—	2.63	J	—	0.552
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.552
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.552
2,2',3,3',4,4',5,5',6-NoCB	206	—	3.18	J	—	3.06
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.31
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.46
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	4.40	K B J	U	0.552
Total PCBs	—	—	232	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-3		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.55	B J	U	0.519
3-MoCB	2	—	1.72	B J	U	0.519
4-MoCB	3	—	2.93	B J	U	0.519
2,2'-DiCB	4	—	1.13	J	—	1.03
2,3-DiCB	5	—	—	U	—	0.952
2,3'-DiCB	6	—	—	U	—	0.827
2,4-DiCB	7	—	2.07	K J	U	0.832
2,4'-DiCB	8	—	1.77	B J	U	0.743
2,5-DiCB	9	—	—	U	—	0.83
2,6-DiCB	10	—	—	U	—	0.804
3,3'-DiCB	11	—	11.0	B J	U	0.957
3,4-DiCB	12	12 + 13	—	C U	—	0.975
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.871
4,4'-DiCB	15	—	2.06	K B J	U	1.09
2,2',3-TriCB	16	—	0.856	K B J	U	0.519
2,2',4-TriCB	17	—	2.19	K J	U	0.519
2,2',5-TriCB	18	18 + 30	2.09	C K B J	U	0.519
2,2',6-TriCB	19	—	0.553	K J	U	0.519
2,3,3'-TriCB	20	20 + 28	3.60	C B J	U	0.519
2,3,4-TriCB	21	21 + 33	2.46	C B J	—	0.519
2,3,4'-TriCB	22	—	1.06	B J	U	0.519
2,3,5-TriCB	23	—	—	U	—	0.519
2,3,6-TriCB	24	—	—	U	—	0.519
2,3',4-TriCB	25	—	0.626	K J	U	0.519
2,3',5-TriCB	26	26 + 29	—	C U	—	0.519
2,3',6-TriCB	27	—	—	U	—	0.519
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.06	B J	U	0.519
2,4',6-TriCB	32	—	—	U	—	0.519
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.519
3,3',4-TriCB	35	—	—	U	—	0.519
3,3',5-TriCB	36	—	—	U	—	0.519
3,4,4'-TriCB	37	—	1.37	B J	—	0.519
3,4,5-TriCB	38	—	—	U	—	0.519
3,4',5-TriCB	39	—	—	U	—	0.519
2,2',3,3'-TeCB	40	40 + 41 + 71	2.66	C B J	U	0.543
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.02	K J	U	0.546
2,2',3,5-TeCB	43	—	—	U	—	0.519
2,2',3,5'-TeCB	44	44 + 47 + 65	81.8	C B	R1	0.519
2,2',3,6-TeCB	45	45 + 51	35.6	C	R1	0.519
2,2',3,6'-TeCB	46	—	—	U	—	0.519
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-3		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.519
2,2',4,5'-TeCB	49	49 + 69	4.46	C K B J	U	0.519
2,2',4,6-TeCB	50	50 + 53	0.707	C K J	U	0.519
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.88	B J	—	0.519
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.519
2,3,3',4-TeCB	55	—	—	U	—	0.552
2,3,3',4'-TeCB	56	—	2.06	K B J	U	0.548
2,3,3',5-TeCB	57	—	—	U	—	0.519
2,3,3',5'-TeCB	58	—	—	U	—	0.522
2,3,3',6-TeCB	59	59 + 62 + 75	0.934	C K J	U	0.519
2,3,4,4'-TeCB	60	—	1.09	J	—	0.556
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	11.9	C B J	U	0.519
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.519
2,3,4',6-TeCB	64	—	2.74	K B J	U	0.519
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.11	B J	U	0.519
2,3',4,5-TeCB	67	—	—	U	—	0.519
2,3',4,5'-TeCB	68	—	157	—	R1	0.519
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.519
2,3',5',6-TeCB	73	—	—	U	—	0.519
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.05	K B J	U	0.526
3,3',4,5-TeCB	78	—	—	U	—	0.552
3,3',4,5'-TeCB	79	—	—	U	—	0.519
3,3',5,5'-TeCB	80	—	—	U	—	0.519
3,4,4',5-TeCB	81	—	—	U	—	0.519
2,2',3,3',4-PeCB	82	—	2.20	J	—	0.832
2,2',3,3',5-PeCB	83	83 + 99	13.6	C B J	U	0.764
2,2',3,3',6-PeCB	84	—	4.59	B J	U	0.896
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.56	C K B J	U	0.617
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	15.3	C B J	U	0.646
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.33	C K B J	U	0.763
2,2',3,4,6'-PeCB	89	—	—	U	—	0.809
2,2',3,4',5-PeCB	90	90 + 101 + 113	24.8	C K B	U	0.663
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	4.29	K B J	U	0.79
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	16.9	C B J	U	0.738
2,2',3,5,6'-PeCB	94	—	—	U	—	0.82

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-3		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.519
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.662
2,2',4,6,6'-PeCB	104	—	—	U	—	0.519
2,3,3',4,4'-PeCB	105	—	7.11	B J	U	0.519
2,3,3',4,5-PeCB	106	—	—	U	—	0.519
2,3,3',4',5-PeCB	107	107 + 124	1.13	C K J	U	0.519
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.70	K B J	U	0.519
2,3,3',4',6-PeCB	110	110 + 115	26.1	C B	U	0.548
2,3,3',5,5'-PeCB	111	—	—	U	—	0.545
2,3,3',5,6-PeCB	112	—	—	U	—	0.554
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.519
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	18.8	B J	U	0.519
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.519
2,3',4,5',6-PeCB	121	—	—	U	—	0.571
2',3,3',4,5-PeCB	122	—	—	U	—	0.519
2',3,4,4',5-PeCB	123	—	—	U	—	0.519
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.569
3,3',4,5,5'-PeCB	127	—	—	U	—	0.519
2,2',3,3',4,4'-HxCB	128	128 + 166	5.16	C B J	—	0.791
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	26.6	C B	—	0.76
2,2',3,3',4,5'-HxCB	130	—	2.01	K J	U	0.938
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.13
2,2',3,3',4,6'-HxCB	132	—	8.53	B J	—	1.13
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.985
2,2',3,3',5,6-HxCB	134	134 + 143	1.64	C J	—	1.12
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	10.1	C B J	—	0.718
2,2',3,3',6,6'-HxCB	136	—	3.13	B J	—	0.572
2,2',3,4,4',5-HxCB	137	—	1.33	K J	U	0.882
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.996
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	4.71	J	—	0.85

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-3		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.08
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.05	J	—	0.728
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.615
2,2',3,4',5,5'-HxCB	146	—	4.59	J	—	0.846
2,2',3,4',5,6-HxCB	147	147 + 149	20.3	C B J	—	1.01
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.777
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.597
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.555
2,2',4,4',5,5'-HxCB	153	153 + 168	23.5	C B	—	0.675
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.519
2,3,3',4,4',5-HxCB	156	156 + 157	3.54	C K J	U	0.984
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.55	J	—	0.605
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.69
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.65
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.735
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.87	K J	U	0.628
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.784
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.18	K J	U	0.659
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.791
2,2',3,3',4,4',5-HpCB	170	—	6.92	B J	—	0.656
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.95	C J	—	0.584
2,2',3,3',4,5,5'-HpCB	172	—	1.58	K J	U	0.595
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	6.64	B J	—	0.524
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.519
2,2',3,3',4,6,6'-HpCB	176	—	0.845	K J	U	0.519
2,2',3,3',4',5,6-HpCB	177	—	5.00	J	—	0.563
2,2',3,3',5,5',6-HpCB	178	—	2.09	J	—	0.519
2,2',3,3',5,6,6'-HpCB	179	—	3.54	J	—	0.519
2,2',3,4,4',5,5'-HpCB	180	180 + 193	17.3	C B J	—	0.519
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.551
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.519
2,2',3,4,4',5',6-HpCB	183	183 + 185	4.77	C J	—	0.519
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.519
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.519
2,2',3,4',5,5',6-HpCB	187	—	10.5	B J	—	0.519
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.519

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-3		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.519
2,3,3',4,4',5,6-HpCB	190	—	1.25	J	—	0.519
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.519
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.519
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	4.73	J	—	0.604
2,2',3,3',4,4',5,6-OcCB	195	—	1.72	J	—	0.639
2,2',3,3',4,4',5,6'-OcCB	196	—	2.20	K J	U	0.555
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.13	C K J	U	0.519
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	7.77	C B J	—	0.572
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.580	K J	U	0.519
2,2',3,3',5,5',6,6'-OcCB	202	—	1.37	K J	U	0.519
2,2',3,4,4',5,5',6-OcCB	203	—	4.52	K J	U	0.537
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.519
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.519
2,2',3,3',4,4',5,5',6-NoCB	206	—	4.58	J	—	1.15
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.875
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.79	K J	U	0.916
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	5.15	B J	—	0.546
Total PCBs	—	—	213	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-3		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.02	B J	U	0.525
3-MoCB	2	—	1.16	B J	U	0.525
4-MoCB	3	—	2.89	B J	U	0.525
2,2'-DiCB	4	—	—	U	—	1.33
2,3-DiCB	5	—	—	U	—	1.22
2,3'-DiCB	6	—	—	U	—	1.06
2,4-DiCB	7	—	1.68	J	J	1.04
2,4'-DiCB	8	—	1.97	B J	U	0.949
2,5-DiCB	9	—	—	U	—	1.05
2,6-DiCB	10	—	—	U	—	1.02
3,3'-DiCB	11	—	13.1	B J	U	1.14
3,4-DiCB	12	12 + 13	—	C U	—	1.16
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.11
4,4'-DiCB	15	—	1.44	B J	U	1.31
2,2',3-TriCB	16	—	0.938	K B J	U	0.525
2,2',4-TriCB	17	—	2.17	J	—	0.525
2,2',5-TriCB	18	18 + 30	1.68	C K B J	U	0.525
2,2',6-TriCB	19	—	—	U	—	0.525
2,3,3'-TriCB	20	20 + 28	3.15	C B J	U	0.525
2,3,4-TriCB	21	21 + 33	3.25	C B J	—	0.525
2,3,4'-TriCB	22	—	1.01	B J	U	0.525
2,3,5-TriCB	23	—	—	U	—	0.525
2,3,6-TriCB	24	—	—	U	—	0.525
2,3',4-TriCB	25	—	0.611	K J	U	0.525
2,3',5-TriCB	26	26 + 29	—	C U	—	0.525
2,3',6-TriCB	27	—	—	U	—	0.525
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.28	B J	U	0.525
2,4',6-TriCB	32	—	—	U	—	0.525
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.525
3,3',4-TriCB	35	—	—	U	—	0.525
3,3',5-TriCB	36	—	—	U	—	0.525
3,4,4'-TriCB	37	—	1.42	B J	—	0.525
3,4,5-TriCB	38	—	—	U	—	0.525
3,4',5-TriCB	39	—	—	U	—	0.525
2,2',3,3'-TeCB	40	40 + 41 + 71	2.39	C B J	U	0.525
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.22	K J	U	0.525
2,2',3,5-TeCB	43	—	—	U	—	0.525
2,2',3,5'-TeCB	44	44 + 47 + 65	149	C B	R1	0.525
2,2',3,6-TeCB	45	45 + 51	52.5	C	R1	0.525
2,2',3,6'-TeCB	46	—	—	U	—	0.525
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-3		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.525
2,2',4,5'-TeCB	49	49 + 69	4.80	C K B J	U	0.525
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.525
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.82	B J	—	0.525
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.525
2,3,3',4-TeCB	55	—	—	U	—	0.631
2,3,3',4'-TeCB	56	—	1.74	K B J	U	0.641
2,3,3',5-TeCB	57	—	—	U	—	0.612
2,3,3',5'-TeCB	58	—	—	U	—	0.605
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.525
2,3,4,4'-TeCB	60	—	1.03	J	—	0.633
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.95	C B J	U	0.595
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.589
2,3,4',6-TeCB	64	—	1.89	B J	U	0.525
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.58	B J	U	0.589
2,3',4,5-TeCB	67	—	—	U	—	0.541
2,3',4,5'-TeCB	68	—	211	—	R1	0.613
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.606
2,3',5',6-TeCB	73	—	—	U	—	0.525
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.06	K B J	U	0.549
3,3',4,5-TeCB	78	—	—	U	—	0.612
3,3',4,5'-TeCB	79	—	—	U	—	0.525
3,3',5,5'-TeCB	80	—	—	U	—	0.561
3,4,4',5-TeCB	81	—	—	U	—	0.548
2,2',3,3',4-PeCB	82	—	1.83	K J	U	0.763
2,2',3,3',5-PeCB	83	83 + 99	10.3	C B J	U	0.68
2,2',3,3',6-PeCB	84	—	4.17	B J	U	0.802
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.22	C B J	U	0.554
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	11.3	C B J	U	0.581
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.55	C B J	U	0.674
2,2',3,4,6'-PeCB	89	—	—	U	—	0.727
2,2',3,4',5-PeCB	90	90 + 101 + 113	18.8	C B J	U	0.596
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.97	B J	U	0.687
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	13.6	C B J	U	0.66
2,2',3,5,6'-PeCB	94	—	—	U	—	0.768

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		KC Sample ID: L55284-3		Collection Date: 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.525
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.621
2,2',4,6,6'-PeCB	104	—	—	U	—	0.525
2,3,3',4,4'-PeCB	105	—	4.89	B J	U	0.574
2,3,3',4,5-PeCB	106	—	—	U	—	0.612
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.625
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.933	K B J	U	0.606
2,3,3',4',6-PeCB	110	110 + 115	19.0	C B J	U	0.525
2,3,3',5,5'-PeCB	111	—	—	U	—	0.525
2,3,3',5,6-PeCB	112	—	—	U	—	0.525
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.574
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	12.3	B J	U	0.559
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.525
2,3',4,5',6-PeCB	121	—	—	U	—	0.525
2',3,3',4,5-PeCB	122	—	—	U	—	0.637
2',3,4,4',5-PeCB	123	—	—	U	—	0.574
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.695
3,3',4,5,5'-PeCB	127	—	—	U	—	0.535
2,2',3,3',4,4'-HxCB	128	128 + 166	3.28	C B J	U	0.641
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	18.2	C B J	U	0.625
2,2',3,3',4,5'-HxCB	130	—	1.11	J	—	0.784
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.872
2,2',3,3',4,6'-HxCB	132	—	5.41	B J	U	0.907
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.811
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.915
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.93	C B J	U	0.705
2,2',3,3',6,6'-HxCB	136	—	2.10	B J	—	0.554
2,2',3,4,4',5-HxCB	137	—	0.936	J	—	0.727
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.789
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.96	K J	U	0.688

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-3		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.859
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.685
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.592
2,2',3,4',5,5'-HxCB	146	—	2.47	J	—	0.669
2,2',3,4',5,6-HxCB	147	147 + 149	13.9	C B J	—	0.831
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.738
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.56
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.545
2,2',4,4',5,5'-HxCB	153	153 + 168	16.5	C B J	—	0.547
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.525
2,3,3',4,4',5-HxCB	156	156 + 157	2.01	C J	—	0.782
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.58	K J	U	0.525
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.554
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.547
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.578
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.21	K J	U	0.526
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.619
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.05	J	—	0.55
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.575
2,2',3,3',4,4',5-HpCB	170	—	3.89	B J	—	0.551
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.09	C K J	U	0.564
2,2',3,3',4,5,5'-HpCB	172	—	0.969	K J	U	0.572
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.62	K B J	U	0.525
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.525
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.525
2,2',3,3',4',5,6-HpCB	177	—	2.06	J	—	0.533
2,2',3,3',5,5',6-HpCB	178	—	0.976	J	—	0.525
2,2',3,3',5,6,6'-HpCB	179	—	1.25	J	—	0.525
2,2',3,4,4',5,5'-HpCB	180	180 + 193	9.58	C K B J	U	0.525
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.525
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.525
2,2',3,4,4',5',6-HpCB	183	183 + 185	3.18	C K J	U	0.525
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.525
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.525
2,2',3,4',5,5',6-HpCB	187	—	5.57	B J	U	0.525
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.525

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-3		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.525
2,3,3',4,4',5,6-HpCB	190	—	0.809	K J	U	0.525
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.525
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.525
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	2.88	J	—	0.525
2,2',3,3',4,4',5,6-OcCB	195	—	0.737	K J	U	0.525
2,2',3,3',4,4',5,6'-OcCB	196	—	1.06	K J	U	0.525
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.525
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.71	C B J	—	0.525
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.525
2,2',3,3',5,5',6,6'-OcCB	202	—	0.898	K J	U	0.525
2,2',3,4,4',5,5',6-OcCB	203	—	2.40	K J	U	0.525
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.525
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.525
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.79	K J	U	0.787
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.589
2,2',3,3',4,5,5',6,6'-NoCB	208	—	0.777	K J	U	0.603
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.87	K B J	U	0.525
Total PCBs	—	—	72.2	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-1		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	0.838	K B J	U	0.52
3-MoCB	2	—	0.789	B J	U	0.52
4-MoCB	3	—	2.25	B J	U	0.52
2,2'-DiCB	4	—	1.16	J	—	1
2,3-DiCB	5	—	—	U	—	0.831
2,3'-DiCB	6	—	—	U	—	0.722
2,4-DiCB	7	—	0.844	J	—	0.726
2,4'-DiCB	8	—	1.72	K B J	U	0.648
2,5-DiCB	9	—	—	U	—	0.725
2,6-DiCB	10	—	—	U	—	0.702
3,3'-DiCB	11	—	12.6	B J	U	0.835
3,4-DiCB	12	12 + 13	—	C U	—	0.851
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.76
4,4'-DiCB	15	—	1.90	B J	U	0.887
2,2',3-TriCB	16	—	0.653	B J	—	0.52
2,2',4-TriCB	17	—	1.62	K J	U	0.52
2,2',5-TriCB	18	18 + 30	1.82	C K B J	U	0.52
2,2',6-TriCB	19	—	0.625	K J	U	0.52
2,3,3'-TriCB	20	20 + 28	3.97	C B J	U	0.52
2,3,4-TriCB	21	21 + 33	2.31	C B J	—	0.52
2,3,4'-TriCB	22	—	1.00	B J	U	0.52
2,3,5-TriCB	23	—	—	U	—	0.52
2,3,6-TriCB	24	—	—	U	—	0.52
2,3',4-TriCB	25	—	—	U	—	0.52
2,3',5-TriCB	26	26 + 29	0.521	C K J	U	0.52
2,3',6-TriCB	27	—	—	U	—	0.52
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.29	B J	U	0.52
2,4',6-TriCB	32	—	0.572	J	—	0.52
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.52
3,3',4-TriCB	35	—	—	U	—	0.52
3,3',5-TriCB	36	—	—	U	—	0.52
3,4,4'-TriCB	37	—	1.37	B J	—	0.52
3,4,5-TriCB	38	—	—	U	—	0.52
3,4',5-TriCB	39	—	—	U	—	0.52
2,2',3,3'-TeCB	40	40 + 41 + 71	3.96	C B J	U	0.52
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.41	J	—	0.52
2,2',3,5-TeCB	43	—	—	U	—	0.52
2,2',3,5'-TeCB	44	44 + 47 + 65	93.5	C B	R1	0.52
2,2',3,6-TeCB	45	45 + 51	30.3	C	R1	0.52
2,2',3,6'-TeCB	46	—	—	U	—	0.52
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-1		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.888	K J	U	0.52
2,2',4,5'-TeCB	49	49 + 69	5.07	C B J	—	0.52
2,2',4,6-TeCB	50	50 + 53	0.674	C K J	U	0.52
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	9.27	B J	—	0.52
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.52
2,3,3',4-TeCB	55	—	—	U	—	0.665
2,3,3',4'-TeCB	56	—	2.37	B J	U	0.66
2,3,3',5-TeCB	57	—	—	U	—	0.614
2,3,3',5'-TeCB	58	—	—	U	—	0.629
2,3,3',6-TeCB	59	59 + 62 + 75	0.676	C K J	U	0.52
2,3,4,4'-TeCB	60	—	1.68	J	—	0.67
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	15.0	C B J	U	0.622
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.598
2,3,4',6-TeCB	64	—	3.35	K B J	U	0.52
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	7.78	B J	U	0.618
2,3',4,5-TeCB	67	—	—	U	—	0.557
2,3',4,5'-TeCB	68	—	148	—	R1	0.618
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.589
2,3',5',6-TeCB	73	—	—	U	—	0.52
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.16	K B J	U	0.561
3,3',4,5-TeCB	78	—	—	U	—	0.665
3,3',4,5'-TeCB	79	—	—	U	—	0.545
3,3',5,5'-TeCB	80	—	—	U	—	0.587
3,4,4',5-TeCB	81	—	—	U	—	0.592
2,2',3,3',4-PeCB	82	—	2.83	K J	U	0.729
2,2',3,3',5-PeCB	83	83 + 99	20.5	C B J	—	0.67
2,2',3,3',6-PeCB	84	—	7.38	B J	U	0.785
2,2',3,4,4'-PeCB	85	85 + 116 + 117	7.54	C B J	U	0.541
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	23.2	C B	U	0.566
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	4.05	C B J	—	0.669
2,2',3,4,6'-PeCB	89	—	—	U	—	0.709
2,2',3,4',5-PeCB	90	90 + 101 + 113	33.4	C B	U	0.581
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	6.68	B J	U	0.692
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	22.9	C B	U	0.647
2,2',3,5,6'-PeCB	94	—	—	U	—	0.719

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-1		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.52
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.58
2,2',4,6,6'-PeCB	104	—	—	U	—	0.52
2,3,3',4,4'-PeCB	105	—	14.2	B J	—	0.579
2,3,3',4,5-PeCB	106	—	—	U	—	0.58
2,3,3',4',5-PeCB	107	107 + 124	1.72	C J	—	0.634
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	3.15	B J	—	0.625
2,3,3',4',6-PeCB	110	110 + 115	42.6	C B	—	0.52
2,3,3',5,5'-PeCB	111	—	—	U	—	0.52
2,3,3',5,6-PeCB	112	—	—	U	—	0.52
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.557
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	31.9	B	—	0.573
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.52
2,3',4,5',6-PeCB	121	—	—	U	—	0.52
2',3,3',4,5-PeCB	122	—	—	U	—	0.648
2',3,4,4',5-PeCB	123	—	0.742	J	—	0.606
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.647
3,3',4,5,5'-PeCB	127	—	—	U	—	0.522
2,2',3,3',4,4'-HxCB	128	128 + 166	11.8	C B J	—	0.52
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	52.9	C B	—	0.52
2,2',3,3',4,5'-HxCB	130	—	3.18	K J	U	0.52
2,2',3,3',4,6-HxCB	131	—	0.837	J	—	0.62
2,2',3,3',4,6'-HxCB	132	—	18.7	B J	—	0.62
2,2',3,3',5,5'-HxCB	133	—	0.770	K J	U	0.542
2,2',3,3',5,6-HxCB	134	134 + 143	2.26	C J	—	0.615
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	14.7	C B J	—	0.52
2,2',3,3',6,6'-HxCB	136	—	5.32	B J	—	0.52
2,2',3,4,4',5-HxCB	137	—	2.84	J	—	0.52
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	1.02	C J	—	0.548
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	7.55	J	—	0.52

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-1		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.596
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	2.02	J	—	0.52
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.52
2,2',3,4',5,5'-HxCB	146	—	7.49	J	—	0.52
2,2',3,4',5,6-HxCB	147	147 + 149	35.9	C B	—	0.557
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.539
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.52
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.52
2,2',4,4',5,5'-HxCB	153	153 + 168	37.2	C B	—	0.52
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.52
2,3,3',4,4',5-HxCB	156	156 + 157	7.10	C J	—	0.522
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	5.45	J	—	0.52
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.52
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.52
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.52
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	3.30	J	—	0.52
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.52
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.50	J	—	0.52
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.52
2,2',3,3',4,4',5-HpCB	170	—	11.1	B J	—	0.559
2,2',3,3',4,4',6-HpCB	171	171 + 173	2.61	C J	—	0.543
2,2',3,3',4,5,5'-HpCB	172	—	2.07	J	—	0.554
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	9.69	B J	—	0.52
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.52
2,2',3,3',4,6,6'-HpCB	176	—	0.783	J	—	0.52
2,2',3,3',4',5,6-HpCB	177	—	6.31	J	—	0.524
2,2',3,3',5,5',6-HpCB	178	—	2.27	K J	U	0.52
2,2',3,3',5,6,6'-HpCB	179	—	4.04	J	—	0.52
2,2',3,4,4',5,5'-HpCB	180	180 + 193	25.2	C B	—	0.52
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.52
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.52
2,2',3,4,4',5',6-HpCB	183	183 + 185	5.71	C K J	U	0.52
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.52
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.52
2,2',3,4',5,5',6-HpCB	187	—	14.9	B J	—	0.52
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.52

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-1		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.720	J	—	0.52
2,3,3',4,4',5,6-HpCB	190	—	2.38	J	—	0.52
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.52
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.52
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	6.60	J	—	0.565
2,2',3,3',4,4',5,6-OcCB	195	—	2.31	K J	U	0.598
2,2',3,3',4,4',5,6'-OcCB	196	—	3.84	K J	U	0.52
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.68	C K J	U	0.52
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	10.4	C B J	—	0.52
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.912	J	—	0.52
2,2',3,3',5,5',6,6'-OcCB	202	—	1.81	K J	U	0.52
2,2',3,4,4',5,5',6-OcCB	203	—	5.93	J	—	0.52
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.52
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.52
2,2',3,3',4,4',5,5',6-NoCB	206	—	4.79	J	—	0.962
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.733
2,2',3,3',4,5,5',6,6'-NoCB	208	—	2.03	J	—	0.766
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	4.45	B J	—	0.52
Total PCBs	—	—	477	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-1			**Collection Date:** 11/19/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	3.86	B J	U	0.269
3-MoCB	2	—	2.94	B J	U	0.313
4-MoCB	3	—	5.23	K B	U	0.318
2,2'-DiCB	4	—	2.31	K J	U	2.25
2,3-DiCB	5	—	—	U	—	1.81
2,3'-DiCB	6	—	—	U	—	1.64
2,4-DiCB	7	—	—	U	—	1.65
2,4'-DiCB	8	—	4.52	K	U	1.53
2,5-DiCB	9	—	1.92	K B J	U	1.63
2,6-DiCB	10	—	—	U	—	1.61
3,3'-DiCB	11	—	20.4	B	—	1.88
3,4-DiCB	12	12 + 13	—	C U	—	1.77
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.67
4,4'-DiCB	15	—	2.80	J	—	1.93
2,2',3-TriCB	16	—	2.90	K J	U	0.844
2,2',4-TriCB	17	—	7.93	K	U	0.739
2,2',5-TriCB	18	18 + 30	6.22	C B	—	0.602
2,2',6-TriCB	19	—	1.01	K J	U	0.727
2,3,3'-TriCB	20	20 + 28	12.0	C B	—	0.499
2,3,4-TriCB	21	21 + 33	8.16	C B	—	0.477
2,3,4'-TriCB	22	—	3.99	B J	—	0.523
2,3,5-TriCB	23	—	—	U	—	0.508
2,3,6-TriCB	24	—	—	U	—	0.539
2,3',4-TriCB	25	—	1.74	J	—	0.417
2,3',5-TriCB	26	26 + 29	1.90	C B J	U	0.499
2,3',6-TriCB	27	—	—	U	—	0.478
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	8.45	B	—	0.473
2,4',6-TriCB	32	—	2.08	B J	—	0.473
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.511
3,3',4-TriCB	35	—	—	U	—	0.591
3,3',5-TriCB	36	—	—	U	—	0.511
3,4,4'-TriCB	37	—	3.13	B J	U	0.56
3,4,5-TriCB	38	—	—	U	—	0.515
3,4',5-TriCB	39	—	—	U	—	0.507
2,2',3,3'-TeCB	40	40 + 41 + 71	6.04	C B	—	0.721
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.59	J	—	0.698
2,2',3,5-TeCB	43	—	—	U	—	0.791
2,2',3,5'-TeCB	44	44 + 47 + 65	99.4	C B	R1	0.645
2,2',3,6-TeCB	45	45 + 51	59.6	C	R1	0.702
2,2',3,6'-TeCB	46	—	—	U	—	0.816
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	2.19	J	—	0.71
2,2',4,5'-TeCB	49	49 + 69	7.95	C B	—	0.596
2,2',4,6-TeCB	50	50 + 53	1.62	C J	—	0.662
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	14.8	B	—	0.668
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.476
2,3,3',4-TeCB	55	—	—	U	—	0.834
2,3,3',4'-TeCB	56	—	6.03	B	—	0.867
2,3,3',5-TeCB	57	—	—	U	—	0.828
2,3,3',5'-TeCB	58	—	—	U	—	0.804
2,3,3',6-TeCB	59	59 + 62 + 75	1.01	C K J	U	0.524
2,3,4,4'-TeCB	60	—	3.16	B J	—	0.886
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	20.3	C B	—	0.814
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.761
2,3,4',6-TeCB	64	—	4.33	B	—	0.501
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	9.62	B	—	0.813
2,3',4,5-TeCB	67	—	—	U	—	0.691
2,3',4,5'-TeCB	68	—	129	—	R1	0.785
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.732
2,3',5',6-TeCB	73	—	—	U	—	0.542
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.04	B J	—	0.874
3,3',4,5-TeCB	78	—	—	U	—	0.855
3,3',4,5'-TeCB	79	—	—	U	—	0.729
3,3',5,5'-TeCB	80	—	—	U	—	0.783
3,4,4',5-TeCB	81	—	—	U	—	0.846
2,2',3,3',4-PeCB	82	—	2.40	J	—	1.37
2,2',3,3',5-PeCB	83	83 + 99	12.8	C B	—	1.26
2,2',3,3',6-PeCB	84	—	4.83	—	—	1.39
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.27	C K	U	1.05
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	13.4	C B	—	1.06
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.00	C J	—	1.19
2,2',3,4,6'-PeCB	89	—	—	U	—	1.31
2,2',3,4',5-PeCB	90	90 + 101 + 113	22.5	C B	—	1.09
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.45	B J G	—	1.26
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	15.5	C B	—	1.12
2,2',3,5,6'-PeCB	94	—	—	U	—	1.29

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.821
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.06
2,2',4,6,6'-PeCB	104	—	—	U	—	0.798
2,3,3',4,4'-PeCB	105	—	8.96	B	—	0.946
2,3,3',4,5-PeCB	106	—	—	U	—	0.904
2,3,3',4',5-PeCB	107	107 + 124	1.14	C K J	U	0.954
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.83	J	—	0.914
2,3,3',4',6-PeCB	110	110 + 115	26.8	C B	—	0.946
2,3,3',5,5'-PeCB	111	—	—	U	—	0.92
2,3,3',5,6-PeCB	112	—	—	U	—	0.845
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.867
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	22.0	B	—	0.817
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.869
2,3',4,5',6-PeCB	121	—	—	U	—	0.93
2',3,3',4,5-PeCB	122	—	—	U	—	1.01
2',3,4,4',5-PeCB	123	—	—	U	—	0.943
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.93
3,3',4,5,5'-PeCB	127	—	—	U	—	0.965
2,2',3,3',4,4'-HxCB	128	128 + 166	5.07	C	—	1.34
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	35.4	C B	—	1.33
2,2',3,3',4,5'-HxCB	130	—	2.16	J	—	1.7
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.57
2,2',3,3',4,6'-HxCB	132	—	9.53	—	—	1.52
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.53
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.52
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.94	C B G	U	1.04
2,2',3,3',6,6'-HxCB	136	—	2.20	J	—	0.746
2,2',3,4,4',5-HxCB	137	—	1.97	K J	U	1.68
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.41
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	5.33	—	—	1.44

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-1			**Collection Date:** 11/19/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.56
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.06
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.824
2,2',3,4',5,5'-HxCB	146	—	3.36	J G	—	1.32
2,2',3,4',5,6-HxCB	147	147 + 149	20.0	C	—	1.36
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.04
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.782
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.728
2,2',4,4',5,5'-HxCB	153	153 + 168	29.7	C B	—	1.15
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.692
2,3,3',4,4',5-HxCB	156	156 + 157	4.48	C J	—	1.16
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	3.30	J	—	1.03
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.09
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U G	—	1.05
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.13
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	2.57	J	—	1.08
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.24
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.53	K J	U	0.964
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.09
2,2',3,3',4,4',5-HpCB	170	—	7.29	—	—	1.64
2,2',3,3',4,4',6-HpCB	171	171 + 173	3.62	C K J	U	1.71
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.82
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	9.57	K	U	1.65
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.6
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	1.12
2,2',3,3',4',5,6-HpCB	177	—	4.71	K	U	1.71
2,2',3,3',5,5',6-HpCB	178	—	1.80	J	—	1.65
2,2',3,3',5,6,6'-HpCB	179	—	3.54	J	—	1.11
2,2',3,4,4',5,5'-HpCB	180	180 + 193	19.3	C B	—	1.12
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.6
2,2',3,4,4',5,6'-HpCB	182	—	—	U G	—	1.51
2,2',3,4,4',5',6-HpCB	183	183 + 185	6.52	C	—	1.62
2,2',3,4,4',6,6'-HpCB	184	—	—	U G	—	1.08
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	1.21
2,2',3,4',5,5',6-HpCB	187	—	12.0	G	—	1.53
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	1.02

Table B2-8. PCB Congener AXYS Analytical Data for Mill Creek (A315) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-1		**Collection Date:** 11/19/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U G	—	1.01
2,3,3',4,4',5,6-HpCB	190	—	2.01	J	—	1.38
2,3,3',4,4',5',6-HpCB	191	—	—	U G	—	1.32
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.44
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	5.16	G	—	1.59
2,2',3,3',4,4',5,6-OcCB	195	—	—	U G	—	1.65
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U G	—	1.77
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.2
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	9.26	C	—	1.87
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.18
2,2',3,3',5,5',6,6'-OcCB	202	—	2.01	J	—	1.03
2,2',3,4,4',5,5',6-OcCB	203	—	4.25	G	—	1.55
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.19
2,3,3',4,4',5,5',6-OcCB	205	—	—	U G	—	1.5
2,2',3,3',4,4',5,5',6-NoCB	206	—	5.43	G	—	2.44
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U G	—	1.66
2,2',3,3',4,5,5',6,6'-NoCB	208	—	2.28	K J G	U	1.44
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	6.19	K B	U	1.65
Total PCBs	—	—	486	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-3		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.54	B J	U	0.553
3-MoCB	2	—	1.45	K B J	U	0.553
4-MoCB	3	—	2.79	B J	U	0.553
2,2'-DiCB	4	—	3.17	J	—	2.86
2,3-DiCB	5	—	—	U	—	2.85
2,3'-DiCB	6	—	—	U	—	2.57
2,4-DiCB	7	—	—	U	—	2.6
2,4'-DiCB	8	—	4.28	B J	U	2.36
2,5-DiCB	9	—	—	U	—	2.52
2,6-DiCB	10	—	—	U	—	2.48
3,3'-DiCB	11	—	17.0	B J	U	2.76
3,4-DiCB	12	12 + 13	—	C U	—	2.8
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.71
4,4'-DiCB	15	—	2.86	B J	U	2.74
2,2',3-TriCB	16	—	3.89	B J	U	0.597
2,2',4-TriCB	17	—	3.68	B J	U	0.553
2,2',5-TriCB	18	18 + 30	6.70	C B J	U	0.553
2,2',6-TriCB	19	—	1.38	J	—	0.553
2,3,3'-TriCB	20	20 + 28	7.60	C B J	U	0.553
2,3,4-TriCB	21	21 + 33	3.36	C K B J	U	0.553
2,3,4'-TriCB	22	—	2.47	B J	U	0.553
2,3,5-TriCB	23	—	—	U	—	0.553
2,3,6-TriCB	24	—	—	U	—	0.553
2,3',4-TriCB	25	—	0.586	K J	U	0.553
2,3',5-TriCB	26	26 + 29	1.29	C K J	U	0.553
2,3',6-TriCB	27	—	0.673	K J	U	0.553
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	5.95	B J	U	0.553
2,4',6-TriCB	32	—	1.79	B J	U	0.553
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.553
3,3',4-TriCB	35	—	—	U	—	0.553
3,3',5-TriCB	36	—	—	U	—	0.553
3,4,4'-TriCB	37	—	1.59	K B J	U	0.553
3,4,5-TriCB	38	—	—	U	—	0.553
3,4',5-TriCB	39	—	—	U	—	0.553
2,2',3,3'-TeCB	40	40 + 41 + 71	3.35	C B J	U	0.553
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.69	B J	—	0.553
2,2',3,5-TeCB	43	—	—	U	—	0.553
2,2',3,5'-TeCB	44	44 + 47 + 65	21.9	C B J	R1	0.553
2,2',3,6-TeCB	45	45 + 51	8.73	C B J	R1	0.553
2,2',3,6'-TeCB	46	—	0.573	K J	U	0.553
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-3		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.49	K B J	U	0.553
2,2',4,5'-TeCB	49	49 + 69	5.16	C B J	U	0.553
2,2',4,6-TeCB	50	50 + 53	1.24	C B J	U	0.553
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	13.4	B J	—	0.553
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.553
2,3,3',4-TeCB	55	—	—	U	—	0.697
2,3,3',4'-TeCB	56	—	2.39	B J	—	0.692
2,3,3',5-TeCB	57	—	—	U	—	0.649
2,3,3',5'-TeCB	58	—	—	U	—	0.649
2,3,3',6-TeCB	59	59 + 62 + 75	0.652	C K J	U	0.553
2,3,4,4'-TeCB	60	—	0.948	K B J	U	0.695
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	12.0	C B J	U	0.647
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.632
2,3,4',6-TeCB	64	—	3.24	K B J	U	0.553
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.65	B J	U	0.639
2,3',4,5-TeCB	67	—	—	U	—	0.567
2,3',4,5'-TeCB	68	—	10.9	J	R1	0.63
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.625
2,3',5',6-TeCB	73	—	—	U	—	0.553
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.01	B J	U	0.629
3,3',4,5-TeCB	78	—	—	U	—	0.704
3,3',4,5'-TeCB	79	—	—	U	—	0.553
3,3',5,5'-TeCB	80	—	—	U	—	0.604
3,4,4',5-TeCB	81	—	—	U	—	0.628
2,2',3,3',4-PeCB	82	—	2.03	B J	—	0.553
2,2',3,3',5-PeCB	83	83 + 99	6.82	C B J	—	0.553
2,2',3,3',6-PeCB	84	—	4.80	K B J	U	0.553
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.93	C K B J	U	0.553
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	10.7	C B J	—	0.553
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.33	C B J	—	0.553
2,2',3,4,6'-PeCB	89	—	—	U	—	0.553
2,2',3,4',5-PeCB	90	90 + 101 + 113	14.9	C K B J	U	0.553
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.23	K B J	U	0.553
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	15.3	C B J	U	0.553
2,2',3,5,6'-PeCB	94	—	—	U	—	0.553

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-3		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.553
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.553
2,2',4,6,6'-PeCB	104	—	—	U	—	0.553
2,3,3',4,4'-PeCB	105	—	5.15	B J	U	0.553
2,3,3',4,5-PeCB	106	—	—	U	—	0.576
2,3,3',4',5-PeCB	107	107 + 124	0.880	C K J	U	0.645
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.899	K J	U	0.634
2,3,3',4',6-PeCB	110	110 + 115	20.0	C B J	U	0.553
2,3,3',5,5'-PeCB	111	—	—	U	—	0.553
2,3,3',5,6-PeCB	112	—	—	U	—	0.553
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.677	J	—	0.553
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	9.83	B J	U	0.553
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.553
2,3',4,5',6-PeCB	121	—	—	U	—	0.553
2',3,3',4,5-PeCB	122	—	—	U	—	0.664
2',3,4,4',5-PeCB	123	—	0.565	K J	U	0.556
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.675
3,3',4,5,5'-PeCB	127	—	—	U	—	0.609
2,2',3,3',4,4'-HxCB	128	128 + 166	3.59	C K J	U	0.553
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	17.9	C B J	—	0.553
2,2',3,3',4,5'-HxCB	130	—	1.14	K B J	U	0.553
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.553
2,2',3,3',4,6'-HxCB	132	—	6.71	J	—	0.553
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.553
2,2',3,3',5,6-HxCB	134	134 + 143	1.05	C J	—	0.553
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	6.18	C J	—	0.553
2,2',3,3',6,6'-HxCB	136	—	2.19	J	—	0.553
2,2',3,4,4',5-HxCB	137	—	0.680	K J	U	0.553
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.553
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	4.05	K J	U	0.553

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-3		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.553
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.867	J	—	0.553
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.553
2,2',3,4',5,5'-HxCB	146	—	2.49	J	—	0.553
2,2',3,4',5,6-HxCB	147	147 + 149	14.6	C B J	—	0.553
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.553
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.553
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.553
2,2',4,4',5,5'-HxCB	153	153 + 168	13.8	C B J	—	0.553
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.553
2,3,3',4,4',5-HxCB	156	156 + 157	2.74	C B J	—	0.553
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.25	K J	U	0.553
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.553
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.553
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.553
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.51	K J	U	0.553
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.553
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.00	K J	U	0.553
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.553
2,2',3,3',4,4',5-HpCB	170	—	5.64	K B J	U	0.553
2,2',3,3',4,4',6-HpCB	171	171 + 173	2.12	C K J	U	0.553
2,2',3,3',4,5,5'-HpCB	172	—	1.41	K J	U	0.553
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	5.01	K B J	U	0.553
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.553
2,2',3,3',4,6,6'-HpCB	176	—	0.708	J	—	0.553
2,2',3,3',4',5,6-HpCB	177	—	2.50	K J	U	0.553
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.553
2,2',3,3',5,6,6'-HpCB	179	—	2.36	J	—	0.553
2,2',3,4,4',5,5'-HpCB	180	180 + 193	11.4	C B J	—	0.553
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.553
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.553
2,2',3,4,4',5',6-HpCB	183	183 + 185	4.13	C B J	—	0.553
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.553
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.553
2,2',3,4',5,5',6-HpCB	187	—	6.78	B J	U	0.553
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.553

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-3		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.553
2,3,3',4,4',5,6-HpCB	190	—	1.51	J	—	0.553
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.553
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.553
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	2.46	K B J	U	0.553
2,2',3,3',4,4',5,6-OcCB	195	—	1.35	K J	U	0.553
2,2',3,3',4,4',5,6'-OcCB	196	—	1.78	K J	U	0.553
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.553
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.27	C B J	—	0.553
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.553
2,2',3,3',5,5',6,6'-OcCB	202	—	0.849	K J	U	0.553
2,2',3,4,4',5,5',6-OcCB	203	—	2.16	K B J	U	0.553
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.553
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.553
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.63	K J	U	0.883
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.762
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.718
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.64	B J	U	0.553
Total PCBs	—	—	137	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-2		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.21	B J	U	0.562
3-MoCB	2	—	1.61	B J	U	0.562
4-MoCB	3	—	3.66	B J	U	0.562
2,2'-DiCB	4	—	4.22	J	—	1.86
2,3-DiCB	5	—	—	U	—	1.6
2,3'-DiCB	6	—	1.58	J	—	1.44
2,4-DiCB	7	—	—	U	—	1.46
2,4'-DiCB	8	—	6.37	B J	U	1.33
2,5-DiCB	9	—	—	U	—	1.41
2,6-DiCB	10	—	—	U	—	1.39
3,3'-DiCB	11	—	34.5	B	U	1.55
3,4-DiCB	12	12 + 13	—	C U	—	1.57
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.52
4,4'-DiCB	15	—	4.66	K B J	U	1.4
2,2',3-TriCB	16	—	4.31	B J	U	0.562
2,2',4-TriCB	17	—	4.84	B J	U	0.562
2,2',5-TriCB	18	18 + 30	8.90	C B J	U	0.562
2,2',6-TriCB	19	—	2.21	J	—	0.562
2,3,3'-TriCB	20	20 + 28	14.2	C B J	U	0.562
2,3,4-TriCB	21	21 + 33	6.51	C B J	U	0.562
2,3,4'-TriCB	22	—	5.46	B J	U	0.562
2,3,5-TriCB	23	—	—	U	—	0.562
2,3,6-TriCB	24	—	—	U	—	0.562
2,3',4-TriCB	25	—	0.939	J	—	0.562
2,3',5-TriCB	26	26 + 29	2.13	C J	—	0.562
2,3',6-TriCB	27	—	0.777	J	—	0.562
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	10.2	B J	U	0.562
2,4',6-TriCB	32	—	3.17	B J	U	0.562
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.562
3,3',4-TriCB	35	—	1.02	J	—	0.562
3,3',5-TriCB	36	—	—	U	—	0.562
3,4,4'-TriCB	37	—	3.83	B J	U	0.562
3,4,5-TriCB	38	—	—	U	—	0.562
3,4',5-TriCB	39	—	—	U	—	0.562
2,2',3,3'-TeCB	40	40 + 41 + 71	7.47	C B J	U	0.562
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	3.29	B J	—	0.562
2,2',3,5-TeCB	43	—	0.629	K J	U	0.562
2,2',3,5'-TeCB	44	44 + 47 + 65	36.3	C B	R1	0.562
2,2',3,6-TeCB	45	45 + 51	13.0	C B J	R1	0.562
2,2',3,6'-TeCB	46	—	1.03	K J	U	0.562
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-2		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	2.40	B J	—	0.562
2,2',4,5'-TeCB	49	49 + 69	8.65	C B J	—	0.562
2,2',4,6-TeCB	50	50 + 53	2.50	C K B J	U	0.562
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	21.9	B J	—	0.562
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	0.818	J	—	0.562
2,3,3',4-TeCB	55	—	—	U	—	0.562
2,3,3',4'-TeCB	56	—	6.73	B J	—	0.562
2,3,3',5-TeCB	57	—	—	U	—	0.562
2,3,3',5'-TeCB	58	—	—	U	—	0.562
2,3,3',6-TeCB	59	59 + 62 + 75	1.12	C J	—	0.562
2,3,4,4'-TeCB	60	—	3.64	B J	U	0.562
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	27.1	C B	U	0.562
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.562
2,3,4',6-TeCB	64	—	5.32	K B J	U	0.562
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	11.6	B J	U	0.562
2,3',4,5-TeCB	67	—	—	U	—	0.562
2,3',4,5'-TeCB	68	—	28.4	—	R1	0.562
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.562
2,3',5',6-TeCB	73	—	—	U	—	0.562
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.70	B J	U	0.562
3,3',4,5-TeCB	78	—	—	U	—	0.562
3,3',4,5'-TeCB	79	—	—	U	—	0.562
3,3',5,5'-TeCB	80	—	—	U	—	0.562
3,4,4',5-TeCB	81	—	0.922	J	—	0.562
2,2',3,3',4-PeCB	82	—	3.54	B J	—	0.562
2,2',3,3',5-PeCB	83	83 + 99	14.0	C B J	—	0.562
2,2',3,3',6-PeCB	84	—	8.73	B J	—	0.562
2,2',3,4,4'-PeCB	85	85 + 116 + 117	5.29	C K B J	U	0.562
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	21.3	C B J	—	0.562
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.69	C B J	—	0.562
2,2',3,4,6'-PeCB	89	—	—	U	—	0.562
2,2',3,4',5-PeCB	90	90 + 101 + 113	26.3	C B	—	0.562
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	4.70	B J	—	0.562
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	24.4	C B	—	0.562
2,2',3,5,6'-PeCB	94	—	—	U	—	0.562

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-2		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.562
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.562
2,2',4,6,6'-PeCB	104	—	—	U	—	0.562
2,3,3',4,4'-PeCB	105	—	9.91	B J	—	0.562
2,3,3',4,5-PeCB	106	—	—	U	—	0.562
2,3,3',4',5-PeCB	107	107 + 124	1.04	C J	—	0.562
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.10	J	—	0.562
2,3,3',4',6-PeCB	110	110 + 115	34.9	C B	—	0.562
2,3,3',5,5'-PeCB	111	—	—	U	—	0.562
2,3,3',5,6-PeCB	112	—	—	U	—	0.562
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.90	J	—	0.562
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	20.9	B J	—	0.562
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.562
2,3',4,5',6-PeCB	121	—	—	U	—	0.562
2',3,3',4,5-PeCB	122	—	—	U	—	0.562
2',3,4,4',5-PeCB	123	—	1.15	J	—	0.562
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.22	K J	U	0.562
3,3',4,5,5'-PeCB	127	—	—	U	—	0.562
2,2',3,3',4,4'-HxCB	128	128 + 166	5.28	C J	—	0.562
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	28.4	C B	—	0.562
2,2',3,3',4,5'-HxCB	130	—	1.69	K B J	U	0.562
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.562
2,2',3,3',4,6'-HxCB	132	—	10.3	J	—	0.562
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.562
2,2',3,3',5,6-HxCB	134	134 + 143	1.08	C K J	U	0.562
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	9.53	C J	—	0.562
2,2',3,3',6,6'-HxCB	136	—	3.19	J	—	0.562
2,2',3,4,4',5-HxCB	137	—	1.49	J	—	0.562
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.562
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	4.63	J	—	0.562

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-2		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.562
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.05	J	—	0.562
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.562
2,2',3,4',5,5'-HxCB	146	—	4.24	J	—	0.562
2,2',3,4',5,6-HxCB	147	147 + 149	21.5	C B J	—	0.562
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.562
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.562
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.562
2,2',4,4',5,5'-HxCB	153	153 + 168	21.1	C B J	—	0.562
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	0.821	J	—	0.562
2,3,3',4,4',5-HxCB	156	156 + 157	4.80	C B J	—	0.562
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.95	J	—	0.562
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.562
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.562
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.562
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	2.07	J	—	0.562
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.562
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.14	K J	U	0.562
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	0.911	K J	U	0.562
2,2',3,3',4,4',5-HpCB	170	—	7.05	B J	—	0.562
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.81	C K J	U	0.562
2,2',3,3',4,5,5'-HpCB	172	—	1.37	J	—	0.562
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	5.49	B J	—	0.562
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.562
2,2',3,3',4,6,6'-HpCB	176	—	0.917	J	—	0.562
2,2',3,3',4',5,6-HpCB	177	—	3.69	J	—	0.562
2,2',3,3',5,5',6-HpCB	178	—	1.53	J	—	0.562
2,2',3,3',5,6,6'-HpCB	179	—	2.77	J	—	0.562
2,2',3,4,4',5,5'-HpCB	180	180 + 193	13.9	C B J	—	0.562
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.562
2,2',3,4,4',5,6'-HpCB	182	—	0.941	K J	U	0.562
2,2',3,4,4',5',6-HpCB	183	183 + 185	5.57	C K B J	U	0.562
2,2',3,4,4',6,6'-HpCB	184	—	0.744	J	—	0.562
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.562
2,2',3,4',5,5',6-HpCB	187	—	9.91	B J	—	0.562
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.562

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-2		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	1.10	K J	U	0.562
2,3,3',4,4',5,6-HpCB	190	—	1.22	K J	U	0.562
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.562
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.562
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	4.56	B J	—	0.562
2,2',3,3',4,4',5,6-OcCB	195	—	1.25	J	—	0.562
2,2',3,3',4,4',5,6'-OcCB	196	—	2.49	J	—	0.562
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.792	C K J	U	0.562
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	3.89	C B J	—	0.562
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.562
2,2',3,3',5,5',6,6'-OcCB	202	—	2.08	J	—	0.562
2,2',3,4,4',5,5',6-OcCB	203	—	2.85	K B J	U	0.562
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.562
2,3,3',4,4',5,5',6-OcCB	205	—	1.27	K J	U	0.562
2,2',3,3',4,4',5,5',6-NoCB	206	—	2.65	J	—	1.06
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.896
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.87	K J	U	0.831
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.36	B J	U	0.562
Total PCBs	—	—	423	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-2		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.49	B J	U	0.6
3-MoCB	2	—	2.30	B J	U	0.756
4-MoCB	3	—	4.31	K B J	U	0.616
2,2'-DiCB	4	—	—	U	—	4.64
2,3-DiCB	5	—	—	U	—	4.02
2,3'-DiCB	6	—	—	U	—	3.63
2,4-DiCB	7	—	—	U	—	3.68
2,4'-DiCB	8	—	4.96	K B J	U	3.34
2,5-DiCB	9	—	—	U	—	3.56
2,6-DiCB	10	—	—	U	—	3.5
3,3'-DiCB	11	—	23.1	B	U	3.9
3,4-DiCB	12	12 + 13	—	C U	—	3.95
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	3.83
4,4'-DiCB	15	—	4.06	B J	U	3.57
2,2',3-TriCB	16	—	3.51	B J	U	0.592
2,2',4-TriCB	17	—	4.40	B J	U	0.558
2,2',5-TriCB	18	18 + 30	7.37	C B J	U	0.558
2,2',6-TriCB	19	—	1.59	J	—	0.558
2,3,3'-TriCB	20	20 + 28	11.7	C B J	U	0.558
2,3,4-TriCB	21	21 + 33	5.38	C B J	U	0.558
2,3,4'-TriCB	22	—	4.06	B J	U	0.558
2,3,5-TriCB	23	—	—	U	—	0.558
2,3,6-TriCB	24	—	—	U	—	0.558
2,3',4-TriCB	25	—	0.722	K J	U	0.558
2,3',5-TriCB	26	26 + 29	1.74	C J	—	0.558
2,3',6-TriCB	27	—	0.648	J	—	0.558
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	7.93	B J	U	0.558
2,4',6-TriCB	32	—	2.05	B J	U	0.558
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.558
3,3',4-TriCB	35	—	—	U	—	0.558
3,3',5-TriCB	36	—	—	U	—	0.558
3,4,4'-TriCB	37	—	2.76	B J	U	0.558
3,4,5-TriCB	38	—	—	U	—	0.558
3,4',5-TriCB	39	—	—	U	—	0.558
2,2',3,3'-TeCB	40	40 + 41 + 71	5.29	C B J	U	0.558
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.69	K B J	U	0.558
2,2',3,5-TeCB	43	—	0.653	K J	U	0.558
2,2',3,5'-TeCB	44	44 + 47 + 65	25.6	C B	R1	0.558
2,2',3,6-TeCB	45	45 + 51	11.4	C B J	R1	0.558
2,2',3,6'-TeCB	46	—	1.17	J	—	0.558
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-2		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	2.07	B J	—	0.558
2,2',4,5'-TeCB	49	49 + 69	6.50	C B J	U	0.558
2,2',4,6-TeCB	50	50 + 53	2.21	C B J	U	0.558
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	17.4	K B J	U	0.558
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.558
2,3,3',4-TeCB	55	—	—	U	—	0.733
2,3,3',4'-TeCB	56	—	4.38	B J	—	0.728
2,3,3',5-TeCB	57	—	—	U	—	0.683
2,3,3',5'-TeCB	58	—	—	U	—	0.683
2,3,3',6-TeCB	59	59 + 62 + 75	0.851	C J	—	0.558
2,3,4,4'-TeCB	60	—	1.83	B J	U	0.732
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	17.1	C B J	U	0.681
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.665
2,3,4',6-TeCB	64	—	4.63	B J	—	0.558
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	7.11	B J	U	0.672
2,3',4,5-TeCB	67	—	—	U	—	0.596
2,3',4,5'-TeCB	68	—	13.2	J	R1	0.663
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.658
2,3',5',6-TeCB	73	—	—	U	—	0.558
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.35	B J	U	0.637
3,3',4,5-TeCB	78	—	—	U	—	0.741
3,3',4,5'-TeCB	79	—	—	U	—	0.573
3,3',5,5'-TeCB	80	—	—	U	—	0.636
3,4,4',5-TeCB	81	—	—	U	—	0.589
2,2',3,3',4-PeCB	82	—	2.45	K B J	U	0.558
2,2',3,3',5-PeCB	83	83 + 99	9.69	C B J	—	0.558
2,2',3,3',6-PeCB	84	—	6.54	B J	—	0.558
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.88	C B J	—	0.558
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	14.1	C B J	—	0.558
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.50	C B J	—	0.558
2,2',3,4,6'-PeCB	89	—	—	U	—	0.558
2,2',3,4',5-PeCB	90	90 + 101 + 113	19.8	C B J	U	0.558
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.17	B J	—	0.558
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	17.9	C B J	—	0.558
2,2',3,5,6'-PeCB	94	—	—	U	—	0.558

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-2		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.558
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.558
2,2',4,6,6'-PeCB	104	—	—	U	—	0.558
2,3,3',4,4'-PeCB	105	—	5.72	B J	U	0.558
2,3,3',4,5-PeCB	106	—	—	U	—	0.558
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.618
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.608
2,3,3',4',6-PeCB	110	110 + 115	24.8	C B	U	0.558
2,3,3',5,5'-PeCB	111	—	—	U	—	0.558
2,3,3',5,6-PeCB	112	—	—	U	—	0.558
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.708	J	—	0.558
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	12.9	B J	U	0.558
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.558
2,3',4,5',6-PeCB	121	—	—	U	—	0.558
2',3,3',4,5-PeCB	122	—	—	U	—	0.636
2',3,4,4',5-PeCB	123	—	0.684	K J	U	0.558
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.574
3,3',4,5,5'-PeCB	127	—	—	U	—	0.584
2,2',3,3',4,4'-HxCB	128	128 + 166	3.59	C K J	U	0.558
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	21.5	C B J	—	0.558
2,2',3,3',4,5'-HxCB	130	—	2.06	K B J	U	0.558
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.558
2,2',3,3',4,6'-HxCB	132	—	8.09	J	—	0.558
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.558
2,2',3,3',5,6-HxCB	134	134 + 143	1.83	C J	—	0.558
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	7.32	C J	—	0.558
2,2',3,3',6,6'-HxCB	136	—	2.33	J	—	0.558
2,2',3,4,4',5-HxCB	137	—	0.993	K J	U	0.558
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.558
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	4.41	J	—	0.558

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-2		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.558
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.13	K J	U	0.558
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.558
2,2',3,4',5,5'-HxCB	146	—	3.42	K J	U	0.558
2,2',3,4',5,6-HxCB	147	147 + 149	15.3	C B J	—	0.558
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.558
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.558
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.558
2,2',4,4',5,5'-HxCB	153	153 + 168	19.2	C B J	—	0.558
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.558
2,3,3',4,4',5-HxCB	156	156 + 157	2.85	C K B J	U	0.558
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.84	K J	U	0.558
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.558
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.558
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.558
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.30	J	—	0.558
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.558
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.44	J	—	0.558
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.558
2,2',3,3',4,4',5-HpCB	170	—	6.83	B J	—	0.558
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.91	C K J	U	0.558
2,2',3,3',4,5,5'-HpCB	172	—	1.31	K J	U	0.558
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	6.40	B J	—	0.558
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.558
2,2',3,3',4,6,6'-HpCB	176	—	0.630	K J	U	0.558
2,2',3,3',4',5,6-HpCB	177	—	3.72	J	—	0.558
2,2',3,3',5,5',6-HpCB	178	—	1.61	K J	U	0.558
2,2',3,3',5,6,6'-HpCB	179	—	2.56	J	—	0.558
2,2',3,4,4',5,5'-HpCB	180	180 + 193	16.1	C B J	—	0.558
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.558
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.558
2,2',3,4,4',5',6-HpCB	183	183 + 185	5.55	C B J	—	0.558
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.558
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.558
2,2',3,4',5,5',6-HpCB	187	—	9.07	B J	—	0.558
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.558

Table B2-9. PCB Congener AXYS Analytical Data for Black River (PS317) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-2		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.558
2,3,3',4,4',5,6-HpCB	190	—	1.56	K J	U	0.558
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.558
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.558
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.52	B J	—	0.558
2,2',3,3',4,4',5,6-OcCB	195	—	1.44	K J	U	0.558
2,2',3,3',4,4',5,6'-OcCB	196	—	1.47	J	—	0.558
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.558
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.26	C B J	—	0.558
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.786	K J	U	0.558
2,2',3,3',5,5',6,6'-OcCB	202	—	1.13	K J	U	0.558
2,2',3,4,4',5,5',6-OcCB	203	—	2.39	B J	—	0.558
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.558
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.558
2,2',3,3',4,4',5,5',6-NoCB	206	—	2.53	J	—	0.709
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.648
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.64
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.52	B J	U	0.558
Total PCBs	—	—	222	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-1		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.35	B J	U	0.513
3-MoCB	2	—	3.00	B J	U	0.513
4-MoCB	3	—	8.03	B J	U	0.513
2,2'-DiCB	4	—	—	U	—	4.13
2,3-DiCB	5	—	—	U	—	3.16
2,3'-DiCB	6	—	—	U	—	2.85
2,4-DiCB	7	—	—	U	—	2.92
2,4'-DiCB	8	—	—	U	—	2.67
2,5-DiCB	9	—	—	U	—	2.77
2,6-DiCB	10	—	—	U	—	2.93
3,3'-DiCB	11	—	10.1	B J	—	3.01
3,4-DiCB	12	12 + 13	—	C U	—	3.05
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.84
4,4'-DiCB	15	—	6.50	K B J	U	3.04
2,2',3-TriCB	16	—	1.12	J	—	0.654
2,2',4-TriCB	17	—	3.93	J	—	0.549
2,2',5-TriCB	18	18 + 30	2.30	C B J	—	0.513
2,2',6-TriCB	19	—	1.10	K J	U	0.513
2,3,3'-TriCB	20	20 + 28	4.59	C B J	U	0.513
2,3,4-TriCB	21	21 + 33	1.89	C B J	U	0.513
2,3,4'-TriCB	22	—	0.868	B J	—	0.513
2,3,5-TriCB	23	—	—	U	—	0.513
2,3,6-TriCB	24	—	—	U	—	0.513
2,3',4-TriCB	25	—	0.700	K J	U	0.513
2,3',5-TriCB	26	26 + 29	—	C U	—	0.513
2,3',6-TriCB	27	—	—	U	—	0.513
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.41	B J	U	0.513
2,4',6-TriCB	32	—	1.42	J	—	0.513
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.513
3,3',4-TriCB	35	—	—	U	—	0.513
3,3',5-TriCB	36	—	—	U	—	0.513
3,4,4'-TriCB	37	—	1.44	J	—	0.513
3,4,5-TriCB	38	—	—	U	—	0.513
3,4',5-TriCB	39	—	—	U	—	0.513
2,2',3,3'-TeCB	40	40 + 41 + 71	5.14	C K J	U	0.642
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.59	J	—	0.677
2,2',3,5-TeCB	43	—	—	U	—	0.809
2,2',3,5'-TeCB	44	44 + 47 + 65	80.1	C B	R1	0.586
2,2',3,6-TeCB	45	45 + 51	17.6	C J	R1	0.647
2,2',3,6'-TeCB	46	—	0.988	J	—	0.733
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-1		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.22	K J	U	0.638
2,2',4,5'-TeCB	49	49 + 69	8.51	C B J	—	0.554
2,2',4,6-TeCB	50	50 + 53	2.34	C K J	U	0.626
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	28.3	B	—	0.591
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.513
2,3,3',4-TeCB	55	—	—	U	—	1.22
2,3,3',4'-TeCB	56	—	4.00	J	—	1.18
2,3,3',5-TeCB	57	—	—	U	—	1.12
2,3,3',5'-TeCB	58	—	—	U	—	1.15
2,3,3',6-TeCB	59	59 + 62 + 75	1.30	C K J	U	0.513
2,3,4,4'-TeCB	60	—	1.44	K J	U	1.21
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	18.8	C B J	—	1.12
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.06
2,3,4',6-TeCB	64	—	5.52	B J	—	0.513
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	7.25	B J	—	1.04
2,3',4,5-TeCB	67	—	—	U	—	1.02
2,3',4,5'-TeCB	68	—	53.3	—	R1	1.1
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.09
2,3',5',6-TeCB	73	—	—	U	—	0.513
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.66	J	—	1.11
3,3',4,5-TeCB	78	—	—	U	—	1.15
3,3',4,5'-TeCB	79	—	—	U	—	0.986
3,3',5,5'-TeCB	80	—	—	U	—	1.05
3,4,4',5-TeCB	81	—	—	U	—	1.11
2,2',3,3',4-PeCB	82	—	7.01	J	—	0.513
2,2',3,3',5-PeCB	83	83 + 99	26.8	C B	—	0.513
2,2',3,3',6-PeCB	84	—	15.8	J	—	0.513
2,2',3,4,4'-PeCB	85	85 + 116 + 117	9.28	C J	—	0.513
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	40.5	C B	—	0.513
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	7.46	C J	—	0.513
2,2',3,4,6'-PeCB	89	—	—	U	—	0.513
2,2',3,4',5-PeCB	90	90 + 101 + 113	57.9	C B	—	0.513
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	10.3	J	—	0.513
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	53.7	C B	—	0.513
2,2',3,5,6'-PeCB	94	—	—	U	—	0.513

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-1		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.513
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.513
2,2',4,6,6'-PeCB	104	—	—	U	—	0.513
2,3,3',4,4'-PeCB	105	—	20.0	B J	—	0.561
2,3,3',4,5-PeCB	106	—	—	U	—	0.603
2,3,3',4',5-PeCB	107	107 + 124	2.38	C J	—	0.624
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	3.76	J	—	0.573
2,3,3',4',6-PeCB	110	110 + 115	72.5	C B	—	0.513
2,3,3',5,5'-PeCB	111	—	—	U	—	0.513
2,3,3',5,6-PeCB	112	—	—	U	—	0.513
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.789	J	—	0.576
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	46.6	B	—	0.582
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.513
2,3',4,5',6-PeCB	121	—	—	U	—	0.513
2',3,3',4,5-PeCB	122	—	0.756	K J	U	0.637
2',3,4,4',5-PeCB	123	—	—	U	—	0.596
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.632
3,3',4,5,5'-PeCB	127	—	—	U	—	0.585
2,2',3,3',4,4'-HxCB	128	128 + 166	15.1	C J	—	0.513
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	87.6	C B	—	0.513
2,2',3,3',4,5'-HxCB	130	—	5.57	K J	U	0.557
2,2',3,3',4,6-HxCB	131	—	1.68	J	—	0.536
2,2',3,3',4,6'-HxCB	132	—	29.7	—	—	0.553
2,2',3,3',5,5'-HxCB	133	—	1.28	J	—	0.513
2,2',3,3',5,6-HxCB	134	134 + 143	4.61	C K J	U	0.547
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	23.8	C B	—	0.513
2,2',3,3',6,6'-HxCB	136	—	8.84	J	—	0.513
2,2',3,4,4',5-HxCB	137	—	4.39	J	—	0.542
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	1.66	C J	—	0.513
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	16.9	J	—	0.513

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-1		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.546
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	3.10	J	—	0.513
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.513
2,2',3,4',5,5'-HxCB	146	—	11.4	J	—	0.513
2,2',3,4',5,6-HxCB	147	147 + 149	65.6	C B	—	0.513
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.513
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.513
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.513
2,2',4,4',5,5'-HxCB	153	153 + 168	63.7	C B	—	0.513
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.513
2,3,3',4,4',5-HxCB	156	156 + 157	9.31	C J	—	0.513
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	9.97	J	—	0.513
2,3,3',4,5,5'-HxCB	159	—	1.10	J	—	0.513
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.513
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.513
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	6.59	K J	U	0.513
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.513
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	3.53	K J	U	0.513
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.513
2,2',3,3',4,4',5-HpCB	170	—	20.1	J	—	0.513
2,2',3,3',4,4',6-HpCB	171	171 + 173	5.64	C J	—	0.513
2,2',3,3',4,5,5'-HpCB	172	—	3.49	J	—	0.513
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	19.9	J	—	0.513
2,2',3,3',4,5',6-HpCB	175	—	1.02	K J	U	0.513
2,2',3,3',4,6,6'-HpCB	176	—	2.39	K J	U	0.513
2,2',3,3',4',5,6-HpCB	177	—	10.3	J	—	0.513
2,2',3,3',5,5',6-HpCB	178	—	4.02	J	—	0.513
2,2',3,3',5,6,6'-HpCB	179	—	7.21	J	—	0.513
2,2',3,4,4',5,5'-HpCB	180	180 + 193	43.6	C	—	0.513
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.513
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.513
2,2',3,4,4',5',6-HpCB	183	183 + 185	14.3	C J	—	0.513
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.513
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.513
2,2',3,4',5,5',6-HpCB	187	—	26.2	B	—	0.513
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.513

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-1		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.707	J	—	0.513
2,3,3',4,4',5,6-HpCB	190	—	3.86	J	—	0.513
2,3,3',4,4',5',6-HpCB	191	—	0.967	J	—	0.513
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.513
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	10.2	J	—	0.513
2,2',3,3',4,4',5,6-OcCB	195	—	4.09	J	—	0.513
2,2',3,3',4,4',5,6'-OcCB	196	—	5.25	J	—	0.513
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.54	C J	—	0.513
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	14.7	C J	—	0.513
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	1.47	K J	U	0.513
2,2',3,3',5,5',6,6'-OcCB	202	—	3.21	J	—	0.513
2,2',3,4,4',5,5',6-OcCB	203	—	7.36	J	—	0.513
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.513
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.513
2,2',3,3',4,4',5,5',6-NoCB	206	—	8.79	J	—	2.59
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.98
2,2',3,3',4,5,5',6,6'-NoCB	208	—	3.38	J	—	1.87
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	5.24	B J	—	0.513
Total PCBs	—	—	1050	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-5		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.26	B J	U	0.536
3-MoCB	2	—	3.33	B J	U	0.536
4-MoCB	3	—	7.86	B J	U	0.536
2,2'-DiCB	4	—	4.51	K J	U	3.89
2,3-DiCB	5	—	—	U	—	2.99
2,3'-DiCB	6	—	—	U	—	2.73
2,4-DiCB	7	—	4.95	B J	U	2.83
2,4'-DiCB	8	—	2.70	K J	U	2.57
2,5-DiCB	9	—	—	U	—	2.7
2,6-DiCB	10	—	—	U	—	2.78
3,3'-DiCB	11	—	18.1	B J	—	2.92
3,4-DiCB	12	12 + 13	—	C U	—	2.95
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.83
4,4'-DiCB	15	—	7.30	B J	U	2.95
2,2',3-TriCB	16	—	4.26	J	—	0.579
2,2',4-TriCB	17	—	12.5	J	—	0.536
2,2',5-TriCB	18	18 + 30	8.11	C B J	—	0.536
2,2',6-TriCB	19	—	1.71	J	—	0.536
2,3,3'-TriCB	20	20 + 28	14.9	C B J	—	0.536
2,3,4-TriCB	21	21 + 33	13.4	C B J	—	0.536
2,3,4'-TriCB	22	—	3.71	B J	—	0.536
2,3,5-TriCB	23	—	—	U	—	0.536
2,3,6-TriCB	24	—	—	U	—	0.536
2,3',4-TriCB	25	—	6.52	J	—	0.536
2,3',5-TriCB	26	26 + 29	1.83	C J	—	0.536
2,3',6-TriCB	27	—	0.973	K J	U	0.536
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	7.87	B J	—	0.536
2,4',6-TriCB	32	—	2.87	J	—	0.536
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.536
3,3',4-TriCB	35	—	0.711	K J	U	0.536
3,3',5-TriCB	36	—	—	U	—	0.536
3,4,4'-TriCB	37	—	3.03	J	—	0.536
3,4,5-TriCB	38	—	—	U	—	0.536
3,4',5-TriCB	39	—	—	U	—	0.536
2,2',3,3'-TeCB	40	40 + 41 + 71	8.01	C J	—	0.694
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	3.27	J	—	0.718
2,2',3,5-TeCB	43	—	—	U	—	0.847
2,2',3,5'-TeCB	44	44 + 47 + 65	1310	C B	R1	0.639
2,2',3,6-TeCB	45	45 + 51	307	C	R1	0.682
2,2',3,6'-TeCB	46	—	—	U	—	0.78
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-5		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.62	J	—	0.684
2,2',4,5'-TeCB	49	49 + 69	26.3	C B	—	0.589
2,2',4,6-TeCB	50	50 + 53	2.69	C J	—	0.665
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	17.4	B J	—	0.639
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.536
2,3,3',4-TeCB	55	—	—	U	—	1.47
2,3,3',4'-TeCB	56	—	3.63	J	—	1.47
2,3,3',5-TeCB	57	—	—	U	—	1.38
2,3,3',5'-TeCB	58	—	—	U	—	1.41
2,3,3',6-TeCB	59	59 + 62 + 75	1.50	C J	—	0.537
2,3,4,4'-TeCB	60	—	1.83	J	—	1.47
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	18.5	C B J	—	1.4
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.33
2,3,4',6-TeCB	64	—	4.83	B J	—	0.536
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	11.4	B J	—	1.34
2,3',4,5-TeCB	67	—	—	U	—	1.25
2,3',4,5'-TeCB	68	—	643	—	R1	1.33
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.35
2,3',5',6-TeCB	73	—	—	U	—	0.536
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.21	J	—	1.4
3,3',4,5-TeCB	78	—	—	U	—	1.4
3,3',4,5'-TeCB	79	—	—	U	—	1.23
3,3',5,5'-TeCB	80	—	—	U	—	1.31
3,4,4',5-TeCB	81	—	—	U	—	1.38
2,2',3,3',4-PeCB	82	—	3.83	J	—	0.536
2,2',3,3',5-PeCB	83	83 + 99	22.4	C B	—	0.536
2,2',3,3',6-PeCB	84	—	7.87	J	—	0.536
2,2',3,4,4'-PeCB	85	85 + 116 + 117	6.64	C J	—	0.536
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	22.6	C B	—	0.536
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	5.21	C J	—	0.536
2,2',3,4,6'-PeCB	89	—	—	U	—	0.536
2,2',3,4',5-PeCB	90	90 + 101 + 113	35.6	C B	—	0.536
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	6.19	J	—	0.536
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	25.3	C B	—	0.536
2,2',3,5,6'-PeCB	94	—	—	U	—	0.536

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-5		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.536
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.536
2,2',4,6,6'-PeCB	104	—	—	U	—	0.536
2,3,3',4,4'-PeCB	105	—	13.2	B J	—	0.536
2,3,3',4,5-PeCB	106	—	—	U	—	0.536
2,3,3',4',5-PeCB	107	107 + 124	1.63	C J	—	0.536
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.08	K J	U	0.536
2,3,3',4',6-PeCB	110	110 + 115	39.1	C B	—	0.536
2,3,3',5,5'-PeCB	111	—	—	U	—	0.536
2,3,3',5,6-PeCB	112	—	—	U	—	0.536
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.757	K J	U	0.536
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	29.0	B	—	0.536
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.536
2,3',4,5',6-PeCB	121	—	—	U	—	0.536
2',3,3',4,5-PeCB	122	—	—	U	—	0.536
2',3,4,4',5-PeCB	123	—	0.938	J	—	0.536
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	0.601	K J	U	0.536
3,3',4,5,5'-PeCB	127	—	—	U	—	0.536
2,2',3,3',4,4'-HxCB	128	128 + 166	10.4	C J	—	0.536
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	56.8	C B	—	0.536
2,2',3,3',4,5'-HxCB	130	—	3.98	K J	U	0.536
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.536
2,2',3,3',4,6'-HxCB	132	—	16.3	J	—	0.536
2,2',3,3',5,5'-HxCB	133	—	0.908	J	—	0.536
2,2',3,3',5,6-HxCB	134	134 + 143	2.56	C K J	U	0.536
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	15.4	C B J	—	0.536
2,2',3,3',6,6'-HxCB	136	—	4.92	J	—	0.536
2,2',3,4,4',5-HxCB	137	—	3.99	K J	U	0.536
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	2.65	C K J	U	0.536
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	12.0	J	—	0.536

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-5		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.536
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	2.08	K J	U	0.536
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.536
2,2',3,4',5,5'-HxCB	146	—	7.86	J	—	0.536
2,2',3,4',5,6-HxCB	147	147 + 149	37.4	C B	—	0.536
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.536
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.536
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.536
2,2',4,4',5,5'-HxCB	153	153 + 168	51.4	C B	—	0.536
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.536
2,3,3',4,4',5-HxCB	156	156 + 157	5.95	C J	—	0.536
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	5.71	K J	U	0.536
2,3,3',4,5,5'-HxCB	159	—	1.08	J	—	0.536
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.536
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.536
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	4.22	K J	U	0.536
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.536
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.88	J	—	0.536
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.536
2,2',3,3',4,4',5-HpCB	170	—	15.5	J	—	0.536
2,2',3,3',4,4',6-HpCB	171	171 + 173	4.64	C J	—	0.536
2,2',3,3',4,5,5'-HpCB	172	—	2.46	K J	U	0.536
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	16.7	J	—	0.536
2,2',3,3',4,5',6-HpCB	175	—	0.883	K J	U	0.536
2,2',3,3',4,6,6'-HpCB	176	—	1.95	K J	U	0.536
2,2',3,3',4',5,6-HpCB	177	—	9.13	J	—	0.536
2,2',3,3',5,5',6-HpCB	178	—	3.97	J	—	0.536
2,2',3,3',5,6,6'-HpCB	179	—	6.47	J	—	0.536
2,2',3,4,4',5,5'-HpCB	180	180 + 193	39.3	C	—	0.536
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.536
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.536
2,2',3,4,4',5',6-HpCB	183	183 + 185	12.7	C J	—	0.536
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.536
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.536
2,2',3,4',5,5',6-HpCB	187	—	20.7	B J	—	0.536
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.536

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-5		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.773	J	—	0.536
2,3,3',4,4',5,6-HpCB	190	—	3.54	J	—	0.536
2,3,3',4,4',5',6-HpCB	191	—	0.586	K J	U	0.536
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.536
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	9.40	J	—	0.536
2,2',3,3',4,4',5,6-OcCB	195	—	3.44	J	—	0.536
2,2',3,3',4,4',5,6'-OcCB	196	—	4.51	J	—	0.536
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	2.12	C J	—	0.536
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	12.7	C J	—	0.536
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.812	J	—	0.536
2,2',3,3',5,5',6,6'-OcCB	202	—	2.46	J	—	0.536
2,2',3,4,4',5,5',6-OcCB	203	—	7.55	J	—	0.536
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.536
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.536
2,2',3,3',4,4',5,5',6-NoCB	206	—	5.96	J	—	2.82
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.09
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.07
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	3.09	K B J	U	0.536
Total PCBs	—	—	827	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-5		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.77	B J	U	0.524
3-MoCB	2	—	3.69	B J	U	0.524
4-MoCB	3	—	8.38	B J	U	0.524
2,2'-DiCB	4	—	3.79	K J	U	3.19
2,3-DiCB	5	—	—	U	—	2.68
2,3'-DiCB	6	—	—	U	—	2.46
2,4-DiCB	7	—	—	U	—	2.49
2,4'-DiCB	8	—	3.28	J	—	2.29
2,5-DiCB	9	—	—	U	—	2.39
2,6-DiCB	10	—	—	U	—	2.42
3,3'-DiCB	11	—	28.5	B	—	2.51
3,4-DiCB	12	12 + 13	—	C U	—	2.53
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.42
4,4'-DiCB	15	—	7.15	B J	U	2.89
2,2',3-TriCB	16	—	2.64	J	—	0.524
2,2',4-TriCB	17	—	4.90	J	—	0.524
2,2',5-TriCB	18	18 + 30	5.49	C B J	—	0.524
2,2',6-TriCB	19	—	1.61	J	—	0.524
2,3,3'-TriCB	20	20 + 28	12.0	C B J	—	0.524
2,3,4-TriCB	21	21 + 33	8.67	C B J	—	0.524
2,3,4'-TriCB	22	—	3.52	B J	—	0.524
2,3,5-TriCB	23	—	—	U	—	0.524
2,3,6-TriCB	24	—	—	U	—	0.524
2,3',4-TriCB	25	—	2.31	J	—	0.524
2,3',5-TriCB	26	26 + 29	1.65	C J	—	0.524
2,3',6-TriCB	27	—	0.557	K J	U	0.524
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	7.54	B J	—	0.524
2,4',6-TriCB	32	—	2.94	J	—	0.524
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.524
3,3',4-TriCB	35	—	0.761	J	—	0.524
3,3',5-TriCB	36	—	—	U	—	0.524
3,4,4'-TriCB	37	—	2.56	J	—	0.524
3,4,5-TriCB	38	—	—	U	—	0.524
3,4',5-TriCB	39	—	—	U	—	0.524
2,2',3,3'-TeCB	40	40 + 41 + 71	4.26	C J	—	0.578
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.84	J	—	0.602
2,2',3,5-TeCB	43	—	—	U	—	0.659
2,2',3,5'-TeCB	44	44 + 47 + 65	230	C B	R1	0.524
2,2',3,6-TeCB	45	45 + 51	107	C	R1	0.552
2,2',3,6'-TeCB	46	—	1.01	J	—	0.637
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-5		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.45	K J	U	0.561
2,2',4,5'-TeCB	49	49 + 69	9.62	C B J	—	0.524
2,2',4,6-TeCB	50	50 + 53	2.12	C J	—	0.524
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	12.6	B J	—	0.533
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.524
2,3,3',4-TeCB	55	—	—	U	—	1.43
2,3,3',4'-TeCB	56	—	3.52	J	—	1.42
2,3,3',5-TeCB	57	—	—	U	—	1.35
2,3,3',5'-TeCB	58	—	—	U	—	1.4
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.524
2,3,4,4'-TeCB	60	—	1.49	J	—	1.42
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	17.6	C B J	—	1.36
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.27
2,3,4',6-TeCB	64	—	3.44	B J	—	0.524
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	8.12	B J	—	1.26
2,3',4,5-TeCB	67	—	—	U	—	1.27
2,3',4,5'-TeCB	68	—	169	—	R1	1.33
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.29
2,3',5',6-TeCB	73	—	—	U	—	0.524
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.79	J	—	1.3
3,3',4,5-TeCB	78	—	—	U	—	1.36
3,3',4,5'-TeCB	79	—	—	U	—	1.16
3,3',5,5'-TeCB	80	—	—	U	—	1.24
3,4,4',5-TeCB	81	—	—	U	—	1.31
2,2',3,3',4-PeCB	82	—	2.78	J	—	0.524
2,2',3,3',5-PeCB	83	83 + 99	12.5	C B J	—	0.524
2,2',3,3',6-PeCB	84	—	6.32	K J	U	0.524
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.59	C J	—	0.524
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	17.1	C B J	—	0.524
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.99	C K J	U	0.524
2,2',3,4,6'-PeCB	89	—	—	U	—	0.524
2,2',3,4',5-PeCB	90	90 + 101 + 113	24.9	C B	—	0.524
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.84	J	—	0.524
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	21.2	C B	—	0.524
2,2',3,5,6'-PeCB	94	—	—	U	—	0.524

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-5		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.524
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.524
2,2',4,6,6'-PeCB	104	—	—	U	—	0.524
2,3,3',4,4'-PeCB	105	—	11.4	B J	—	0.524
2,3,3',4,5-PeCB	106	—	—	U	—	0.524
2,3,3',4',5-PeCB	107	107 + 124	1.29	C J	—	0.525
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.28	J	—	0.524
2,3,3',4',6-PeCB	110	110 + 115	35.5	C B	—	0.524
2,3,3',5,5'-PeCB	111	—	—	U	—	0.524
2,3,3',5,6-PeCB	112	—	—	U	—	0.524
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.692	J	—	0.524
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	26.9	B	—	0.524
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.524
2,3',4,5',6-PeCB	121	—	—	U	—	0.524
2',3,3',4,5-PeCB	122	—	—	U	—	0.541
2',3,4,4',5-PeCB	123	—	—	U	—	0.524
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.54
3,3',4,5,5'-PeCB	127	—	—	U	—	0.524
2,2',3,3',4,4'-HxCB	128	128 + 166	8.84	C J	—	0.524
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	55.2	C B	—	0.524
2,2',3,3',4,5'-HxCB	130	—	3.59	J	—	0.524
2,2',3,3',4,6-HxCB	131	—	0.881	K J	U	0.524
2,2',3,3',4,6'-HxCB	132	—	19.1	J	—	0.524
2,2',3,3',5,5'-HxCB	133	—	0.539	K J	U	0.524
2,2',3,3',5,6-HxCB	134	134 + 143	2.85	C J	—	0.524
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	11.8	C B J	—	0.524
2,2',3,3',6,6'-HxCB	136	—	3.72	J	—	0.524
2,2',3,4,4',5-HxCB	137	—	2.70	J	—	0.524
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.524
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	9.49	K J	U	0.524

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-5		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.524
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.837	K J	U	0.524
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.524
2,2',3,4',5,5'-HxCB	146	—	8.46	J	—	0.524
2,2',3,4',5,6-HxCB	147	147 + 149	39.1	C B	—	0.524
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.524
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.524
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.524
2,2',4,4',5,5'-HxCB	153	153 + 168	46.4	C B	—	0.524
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.524
2,3,3',4,4',5-HxCB	156	156 + 157	6.48	C K J	U	0.524
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	5.01	J	—	0.524
2,3,3',4,5,5'-HxCB	159	—	1.49	J	—	0.524
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.524
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.524
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	4.32	J	—	0.524
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.524
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.26	K J	U	0.524
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.524
2,2',3,3',4,4',5-HpCB	170	—	14.5	J	—	0.524
2,2',3,3',4,4',6-HpCB	171	171 + 173	4.29	C J	—	0.524
2,2',3,3',4,5,5'-HpCB	172	—	2.51	K J	U	0.524
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	14.2	J	—	0.524
2,2',3,3',4,5',6-HpCB	175	—	0.758	K J	U	0.524
2,2',3,3',4,6,6'-HpCB	176	—	1.85	K J	U	0.524
2,2',3,3',4',5,6-HpCB	177	—	7.79	J	—	0.524
2,2',3,3',5,5',6-HpCB	178	—	3.02	J	—	0.524
2,2',3,3',5,6,6'-HpCB	179	—	5.55	J	—	0.524
2,2',3,4,4',5,5'-HpCB	180	180 + 193	39.0	C	—	0.524
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.524
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.524
2,2',3,4,4',5',6-HpCB	183	183 + 185	9.76	C J	—	0.524
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.524
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.524
2,2',3,4',5,5',6-HpCB	187	—	18.6	B J	—	0.524
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.524

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-5		**Collection Date:**	3/5/2012	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.524
2,3,3',4,4',5,6-HpCB	190	—	3.00	K J	U	0.524
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.524
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.524
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	11.4	J	—	0.524
2,2',3,3',4,4',5,6-OcCB	195	—	3.95	J	—	0.524
2,2',3,3',4,4',5,6'-OcCB	196	—	1.04	K J	U	0.524
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	2.19	C J	—	0.524
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	9.33	C J	—	0.524
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.754	J	—	0.524
2,2',3,3',5,5',6,6'-OcCB	202	—	1.92	J	—	0.524
2,2',3,4,4',5,5',6-OcCB	203	—	4.99	K J	U	0.524
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.524
2,3,3',4,4',5,5',6-OcCB	205	—	0.642	K J	U	0.524
2,2',3,3',4,4',5,5',6-NoCB	206	—	5.92	J	—	4.59
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	3.3
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	3.6
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	3.24	K B J	U	0.524
Total PCBs	—	—	686	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-5		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.51	B J	U	0.516
3-MoCB	2	—	1.78	B J	U	0.516
4-MoCB	3	—	3.06	B J	U	0.516
2,2'-DiCB	4	—	1.31	J	—	0.775
2,3-DiCB	5	—	—	U	—	0.736
2,3'-DiCB	6	—	—	U	—	0.639
2,4-DiCB	7	—	0.777	J	—	0.643
2,4'-DiCB	8	—	1.57	B J	U	0.574
2,5-DiCB	9	—	—	U	—	0.642
2,6-DiCB	10	—	—	U	—	0.621
3,3'-DiCB	11	—	12.3	B J	U	0.74
3,4-DiCB	12	12 + 13	—	C U	—	0.753
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.673
4,4'-DiCB	15	—	2.77	B J	U	0.86
2,2',3-TriCB	16	—	1.40	B J	—	0.516
2,2',4-TriCB	17	—	2.10	J	—	0.516
2,2',5-TriCB	18	18 + 30	2.90	C B J	—	0.516
2,2',6-TriCB	19	—	1.25	J	—	0.516
2,3,3'-TriCB	20	20 + 28	4.16	C B J	U	0.516
2,3,4-TriCB	21	21 + 33	1.97	C B J	—	0.516
2,3,4'-TriCB	22	—	0.678	B J	U	0.516
2,3,5-TriCB	23	—	—	U	—	0.516
2,3,6-TriCB	24	—	—	U	—	0.516
2,3',4-TriCB	25	—	—	U	—	0.516
2,3',5-TriCB	26	26 + 29	—	C U	—	0.516
2,3',6-TriCB	27	—	—	U	—	0.516
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.04	B J	U	0.516
2,4',6-TriCB	32	—	1.10	J	—	0.516
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.516
3,3',4-TriCB	35	—	—	U	—	0.516
3,3',5-TriCB	36	—	—	U	—	0.516
3,4,4'-TriCB	37	—	1.74	K B J	U	0.516
3,4,5-TriCB	38	—	—	U	—	0.516
3,4',5-TriCB	39	—	—	U	—	0.516
2,2',3,3'-TeCB	40	40 + 41 + 71	4.97	C B J	—	0.516
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.28	J	—	0.516
2,2',3,5-TeCB	43	—	—	U	—	0.516
2,2',3,5'-TeCB	44	44 + 47 + 65	152	C B	R1	0.516
2,2',3,6-TeCB	45	45 + 51	31.1	C	R1	0.516
2,2',3,6'-TeCB	46	—	—	U	—	0.516
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-5		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.25	K J	U	0.516
2,2',4,5'-TeCB	49	49 + 69	7.30	C B J	—	0.516
2,2',4,6-TeCB	50	50 + 53	1.00	C J	—	0.516
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	14.5	B J	—	0.516
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.516
2,3,3',4-TeCB	55	—	—	U	—	0.803
2,3,3',4'-TeCB	56	—	2.39	B J	U	0.797
2,3,3',5-TeCB	57	—	—	U	—	0.741
2,3,3',5'-TeCB	58	—	—	U	—	0.76
2,3,3',6-TeCB	59	59 + 62 + 75	1.16	C K J	U	0.516
2,3,4,4'-TeCB	60	—	1.52	J	—	0.809
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	13.0	C B J	U	0.751
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.722
2,3,4',6-TeCB	64	—	4.41	B J	U	0.516
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	6.05	B J	U	0.746
2,3',4,5-TeCB	67	—	—	U	—	0.673
2,3',4,5'-TeCB	68	—	203	—	R1	0.746
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.711
2,3',5',6-TeCB	73	—	—	U	—	0.516
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.67	B J	—	0.68
3,3',4,5-TeCB	78	—	—	U	—	0.803
3,3',4,5'-TeCB	79	—	—	U	—	0.658
3,3',5,5'-TeCB	80	—	—	U	—	0.709
3,4,4',5-TeCB	81	—	—	U	—	0.746
2,2',3,3',4-PeCB	82	—	4.31	J	—	0.793
2,2',3,3',5-PeCB	83	83 + 99	15.4	C B J	U	0.728
2,2',3,3',6-PeCB	84	—	8.60	B J	U	0.854
2,2',3,4,4'-PeCB	85	85 + 116 + 117	5.33	C B J	U	0.588
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	20.9	C B	U	0.616
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.66	C B J	U	0.727
2,2',3,4,6'-PeCB	89	—	—	U	—	0.77
2,2',3,4',5-PeCB	90	90 + 101 + 113	28.9	C B	U	0.631
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	5.15	B J	U	0.752
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	26.2	C B	—	0.703
2,2',3,5,6'-PeCB	94	—	—	U	—	0.781

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-5		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.516
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.631
2,2',4,6,6'-PeCB	104	—	—	U	—	0.516
2,3,3',4,4'-PeCB	105	—	11.4	B J	U	0.516
2,3,3',4,5-PeCB	106	—	—	U	—	0.516
2,3,3',4',5-PeCB	107	107 + 124	1.79	C J	—	0.516
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.75	K B J	U	0.516
2,3,3',4',6-PeCB	110	110 + 115	37.5	C B	U	0.522
2,3,3',5,5'-PeCB	111	—	—	U	—	0.519
2,3,3',5,6-PeCB	112	—	—	U	—	0.528
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.857	J	—	0.516
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	24.1	B	U	0.516
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.516
2,3',4,5',6-PeCB	121	—	—	U	—	0.543
2',3,3',4,5-PeCB	122	—	—	U	—	0.516
2',3,4,4',5-PeCB	123	—	0.801	K J	U	0.516
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.516
3,3',4,5,5'-PeCB	127	—	—	U	—	0.516
2,2',3,3',4,4'-HxCB	128	128 + 166	8.46	C K B J	U	0.516
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	38.2	C B	—	0.516
2,2',3,3',4,5'-HxCB	130	—	2.68	J	—	0.578
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.695
2,2',3,3',4,6'-HxCB	132	—	15.9	B J	—	0.695
2,2',3,3',5,5'-HxCB	133	—	0.664	J	—	0.607
2,2',3,3',5,6-HxCB	134	134 + 143	0.788	C J	—	0.688
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	12.7	C B J	—	0.621
2,2',3,3',6,6'-HxCB	136	—	4.54	B J	—	0.516
2,2',3,4,4',5-HxCB	137	—	2.13	J	—	0.544
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.797	C J	—	0.614
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	6.85	J	—	0.524

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-5		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.667
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.70	J	—	0.629
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.532
2,2',3,4',5,5'-HxCB	146	—	6.08	J	—	0.521
2,2',3,4',5,6-HxCB	147	147 + 149	30.2	C B	—	0.624
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.672
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.516
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.516
2,2',4,4',5,5'-HxCB	153	153 + 168	30.0	C B	—	0.516
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.516
2,3,3',4,4',5-HxCB	156	156 + 157	5.48	C J	—	0.59
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	3.77	J	—	0.516
2,3,3',4,5,5'-HxCB	159	—	0.608	K J	U	0.516
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.516
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.516
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	2.37	K J	U	0.516
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.516
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.41	K J	U	0.516
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.516
2,2',3,3',4,4',5-HpCB	170	—	10.8	K B J	U	0.633
2,2',3,3',4,4',6-HpCB	171	171 + 173	3.62	C J	—	0.571
2,2',3,3',4,5,5'-HpCB	172	—	2.20	K J	U	0.582
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	10.2	B J	—	0.516
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.516
2,2',3,3',4,6,6'-HpCB	176	—	0.961	K J	U	0.516
2,2',3,3',4',5,6-HpCB	177	—	6.43	J	—	0.551
2,2',3,3',5,5',6-HpCB	178	—	1.86	J	—	0.516
2,2',3,3',5,6,6'-HpCB	179	—	4.35	J	—	0.516
2,2',3,4,4',5,5'-HpCB	180	180 + 193	24.9	C B	—	0.516
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.539
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.516
2,2',3,4,4',5',6-HpCB	183	183 + 185	7.45	C K J	U	0.516
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.516
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.516
2,2',3,4',5,5',6-HpCB	187	—	12.8	K B J	U	0.516
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.516

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-5		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.516
2,3,3',4,4',5,6-HpCB	190	—	1.94	J	—	0.516
2,3,3',4,4',5',6-HpCB	191	—	0.679	K J	U	0.516
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.516
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	6.46	J	—	0.565
2,2',3,3',4,4',5,6-OcCB	195	—	2.48	K J	U	0.598
2,2',3,3',4,4',5,6'-OcCB	196	—	2.90	J	—	0.516
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.82	C J	—	0.516
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	9.54	C B J	—	0.522
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	1.05	K J	U	0.516
2,2',3,3',5,5',6,6'-OcCB	202	—	2.35	J	—	0.516
2,2',3,4,4',5,5',6-OcCB	203	—	5.27	K J	U	0.516
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.516
2,3,3',4,4',5,5',6-OcCB	205	—	0.552	J	—	0.516
2,2',3,3',4,4',5,5',6-NoCB	206	—	4.06	K J	U	0.885
2,2',3,3',4,4',5,6,6'-NoCB	207	—	0.751	J	—	0.679
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.63	K J	U	0.712
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.79	K B J	U	0.516
Total PCBs	—	—	319	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-2		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.62	B J	U	0.526
3-MoCB	2	—	1.93	B J	U	0.526
4-MoCB	3	—	4.17	B J	U	0.526
2,2'-DiCB	4	—	2.15	J	—	1.4
2,3-DiCB	5	—	—	U	—	1.09
2,3'-DiCB	6	—	3.77	J	—	0.961
2,4-DiCB	7	—	1.30	J	—	1.01
2,4'-DiCB	8	—	5.87	B J	U	0.895
2,5-DiCB	9	—	—	U	—	0.952
2,6-DiCB	10	—	—	U	—	0.952
3,3'-DiCB	11	—	99.9	B	—	1.03
3,4-DiCB	12	12 + 13	1.77	C K J	U	1.07
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1
4,4'-DiCB	15	—	6.41	B J	—	1.12
2,2',3-TriCB	16	—	5.15	B J	—	0.687
2,2',4-TriCB	17	—	5.16	J	—	0.567
2,2',5-TriCB	18	18 + 30	10.8	C B J	—	0.526
2,2',6-TriCB	19	—	2.21	K J	U	0.591
2,3,3'-TriCB	20	20 + 28	20.2	C B J	—	0.526
2,3,4-TriCB	21	21 + 33	8.92	C B J	—	0.526
2,3,4'-TriCB	22	—	6.04	B J	—	0.526
2,3,5-TriCB	23	—	—	U	—	0.526
2,3,6-TriCB	24	—	—	U	—	0.526
2,3',4-TriCB	25	—	1.30	J	—	0.526
2,3',5-TriCB	26	26 + 29	2.92	C J	—	0.526
2,3',6-TriCB	27	—	1.24	J	—	0.526
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	13.1	B J	—	0.526
2,4',6-TriCB	32	—	4.97	J	—	0.526
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.526
3,3',4-TriCB	35	—	2.08	J	—	0.526
3,3',5-TriCB	36	—	0.754	K J	U	0.526
3,4,4'-TriCB	37	—	6.49	B J	—	0.526
3,4,5-TriCB	38	—	—	U	—	0.526
3,4',5-TriCB	39	—	—	U	—	0.526
2,2',3,3'-TeCB	40	40 + 41 + 71	13.2	C B J	—	0.647
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	5.60	J	—	0.665
2,2',3,5-TeCB	43	—	0.741	J	—	0.693
2,2',3,5'-TeCB	44	44 + 47 + 65	78.1	C B	R1	0.562
2,2',3,6-TeCB	45	45 + 51	22.9	C	R1	0.573
2,2',3,6'-TeCB	46	—	1.64	J	—	0.679
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-2		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	4.34	J	—	0.616
2,2',4,5'-TeCB	49	49 + 69	12.5	C B J	—	0.526
2,2',4,6-TeCB	50	50 + 53	3.58	C J	—	0.559
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	33.8	B	—	0.544
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.526
2,3,3',4-TeCB	55	—	—	U	—	1.33
2,3,3',4'-TeCB	56	—	9.78	B J	—	1.3
2,3,3',5-TeCB	57	—	—	U	—	1.23
2,3,3',5'-TeCB	58	—	—	U	—	1.26
2,3,3',6-TeCB	59	59 + 62 + 75	2.12	C J	—	0.526
2,3,4,4'-TeCB	60	—	5.79	J	—	1.31
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	47.4	C B	—	1.26
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.22
2,3,4',6-TeCB	64	—	11.0	B J	—	0.526
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	21.9	B	—	1.21
2,3',4,5-TeCB	67	—	—	U	—	1.1
2,3',4,5'-TeCB	68	—	77.8	—	R1	1.26
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.23
2,3',5',6-TeCB	73	—	—	U	—	0.526
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	3.98	B J	—	1.27
3,3',4,5-TeCB	78	—	—	U	—	1.26
3,3',4,5'-TeCB	79	—	—	U	—	1.09
3,3',5,5'-TeCB	80	—	—	U	—	1.15
3,4,4',5-TeCB	81	—	—	U	—	1.2
2,2',3,3',4-PeCB	82	—	10.0	J	—	1.23
2,2',3,3',5-PeCB	83	83 + 99	49.5	C B	—	1.17
2,2',3,3',6-PeCB	84	—	24.1	B	—	1.32
2,2',3,4,4'-PeCB	85	85 + 116 + 117	18.2	C B J	—	0.921
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	64.0	C B	—	0.975
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	10.5	C B J	—	1.13
2,2',3,4,6'-PeCB	89	—	—	U	—	1.16
2,2',3,4',5-PeCB	90	90 + 101 + 113	84.7	C B	—	0.989
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	13.7	B J	—	1.13
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	62.7	C B	—	1.1
2,2',3,5,6'-PeCB	94	—	—	U	—	1.28

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-2		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.564
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.06
2,2',4,6,6'-PeCB	104	—	—	U	—	0.526
2,3,3',4,4'-PeCB	105	—	42.8	B D J	U	4.01
2,3,3',4,5-PeCB	106	—	—	U	—	0.878
2,3,3',4',5-PeCB	107	107 + 124	4.09	C J	—	0.949
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	8.04	K B J	U	0.857
2,3,3',4',6-PeCB	110	110 + 115	113	C B	—	0.808
2,3,3',5,5'-PeCB	111	—	—	U	—	0.788
2,3,3',5,6-PeCB	112	—	—	U	—	0.851
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.39	K J	U	0.883
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	84.7	B	—	0.872
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.739
2,3',4,5',6-PeCB	121	—	—	U	—	0.83
2',3,3',4,5-PeCB	122	—	—	U	—	0.951
2',3,4,4',5-PeCB	123	—	2.14	J	—	0.876
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.982
3,3',4,5,5'-PeCB	127	—	—	U	—	0.811
2,2',3,3',4,4'-HxCB	128	128 + 166	30.7	C B D J G	—	5.85
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	181	C B	—	1.24
2,2',3,3',4,5'-HxCB	130	—	11.6	J	—	1.58
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.74
2,2',3,3',4,6'-HxCB	132	—	44.2	B	—	1.82
2,2',3,3',5,5'-HxCB	133	—	4.39	J	—	1.65
2,2',3,3',5,6-HxCB	134	134 + 143	6.54	C J	—	1.79
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	44.8	C B	—	0.892
2,2',3,3',6,6'-HxCB	136	—	14.5	B J	—	0.722
2,2',3,4,4',5-HxCB	137	—	7.41	J	—	1.39
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	2.83	C J	—	1.59
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	26.7	—	—	1.4

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-2		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.78
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	5.92	J	—	0.887
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.753
2,2',3,4',5,5'-HxCB	146	—	29.1	—	—	1.34
2,2',3,4',5,6-HxCB	147	147 + 149	101	C B	—	1.61
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.94
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.744
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.69
2,2',4,4',5,5'-HxCB	153	153 + 168	158	C B	—	1.15
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	3.28	J	—	0.526
2,3,3',4,4',5-HxCB	156	156 + 157	18.4	C J	—	1.4
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	14.6	J	—	0.96
2,3,3',4,5,5'-HxCB	159	—	1.43	J	—	1.07
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	1.12
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.12
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	10.9	J	—	1.11
2,3,3',5,5',6-HxCB	165	—	—	U G	—	1.27
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	6.40	J	—	1.02
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.02
2,2',3,3',4,4',5-HpCB	170	—	41.2	B	—	0.752
2,2',3,3',4,4',6-HpCB	171	171 + 173	13.9	C J	—	0.796
2,2',3,3',4,5,5'-HpCB	172	—	8.91	J	—	0.759
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	34.6	B	—	0.732
2,2',3,3',4,5',6-HpCB	175	—	2.54	K J	U	0.684
2,2',3,3',4,6,6'-HpCB	176	—	3.36	J	—	0.546
2,2',3,3',4',5,6-HpCB	177	—	26.7	—	—	0.769
2,2',3,3',5,5',6-HpCB	178	—	11.6	J	—	0.695
2,2',3,3',5,6,6'-HpCB	179	—	13.9	K J	U	0.562
2,2',3,4,4',5,5'-HpCB	180	180 + 193	109	C B	—	0.64
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.75
2,2',3,4,4',5,6'-HpCB	182	—	0.801	K J	U	0.695
2,2',3,4,4',5',6-HpCB	183	183 + 185	31.8	C	—	0.697
2,2',3,4,4',6,6'-HpCB	184	—	3.86	K J	U	0.541
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.557
2,2',3,4',5,5',6-HpCB	187	—	74.1	B D J G	—	4.21
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.526

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55384-2		**Collection Date:** 3/29/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	1.84	J	—	0.828
2,3,3',4,4',5,6-HpCB	190	—	9.20	J	—	0.547
2,3,3',4,4',5',6-HpCB	191	—	1.06	K J	U	0.553
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.606
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	20.8	J	—	0.89
2,2',3,3',4,4',5,6-OcCB	195	—	8.04	J	—	0.995
2,2',3,3',4,4',5,6'-OcCB	196	—	12.6	J	—	0.665
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	5.30	C D J G	—	3.13
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	30.3	C B D J G	—	4.33
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	3.82	J	—	0.526
2,2',3,3',5,5',6,6'-OcCB	202	—	7.73	J	—	0.542
2,2',3,4,4',5,5',6-OcCB	203	—	19.2	J	—	0.629
2,2',3,4,4',5,6,6'-OcCB	204	—	1.37	K J	U	0.526
2,3,3',4,4',5,5',6-OcCB	205	—	1.69	J	—	0.713
2,2',3,3',4,4',5,5',6-NoCB	206	—	9.51	J	—	2.48
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.9
2,2',3,3',4,5,5',6,6'-NoCB	208	—	3.67	J	—	1.93
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	5.15	K B J	U	0.892
Total PCBs	—	—	2130	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-2		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	5.47	B	U	0.524
3-MoCB	2	—	4.02	B J	U	0.578
4-MoCB	3	—	5.29	K B	U	0.576
2,2'-DiCB	4	—	3.34	J	—	1.83
2,3-DiCB	5	—	—	U	—	1.51
2,3'-DiCB	6	—	—	U	—	1.36
2,4-DiCB	7	—	—	U	—	1.42
2,4'-DiCB	8	—	3.32	J	—	1.28
2,5-DiCB	9	—	—	U	—	1.35
2,6-DiCB	10	—	—	U	—	1.38
3,3'-DiCB	11	—	19.5	B	—	1.54
3,4-DiCB	12	12 + 13	—	C U	—	1.55
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.44
4,4'-DiCB	15	—	3.23	K J	U	1.61
2,2',3-TriCB	16	—	2.91	J	—	1.34
2,2',4-TriCB	17	—	4.96	K	U	1.14
2,2',5-TriCB	18	18 + 30	5.22	C B	U	0.934
2,2',6-TriCB	19	—	2.18	K J	U	1.24
2,3,3'-TriCB	20	20 + 28	11.6	C B	—	0.755
2,3,4-TriCB	21	21 + 33	4.26	C B	—	0.72
2,3,4'-TriCB	22	—	2.62	K B J	U	0.811
2,3,5-TriCB	23	—	—	U	—	0.777
2,3,6-TriCB	24	—	—	U	—	0.847
2,3',4-TriCB	25	—	2.04	J	—	0.663
2,3',5-TriCB	26	26 + 29	1.38	C B J	U	0.744
2,3',6-TriCB	27	—	0.827	K J	U	0.765
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	6.00	B	U	0.7
2,4',6-TriCB	32	—	2.09	B J	—	0.702
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.76
3,3',4-TriCB	35	—	—	U	—	0.817
3,3',5-TriCB	36	—	—	U	—	0.748
3,4,4'-TriCB	37	—	2.43	B J	U	0.727
3,4,5-TriCB	38	—	—	U	—	0.761
3,4',5-TriCB	39	—	—	U	—	0.753
2,2',3,3'-TeCB	40	40 + 41 + 71	5.15	C B	—	0.803
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.89	J	—	0.837
2,2',3,5-TeCB	43	—	—	U	—	0.933
2,2',3,5'-TeCB	44	44 + 47 + 65	74.3	C B	R1	0.741
2,2',3,6-TeCB	45	45 + 51	32.2	C	R1	0.82
2,2',3,6'-TeCB	46	—	—	U	—	0.948
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-2		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.11	J	—	0.816
2,2',4,5'-TeCB	49	49 + 69	7.70	C B	—	0.689
2,2',4,6-TeCB	50	50 + 53	1.89	C K J	U	0.794
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	13.9	B	—	0.759
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.574
2,3,3',4-TeCB	55	—	—	U	—	1.46
2,3,3',4'-TeCB	56	—	4.49	B	U	1.44
2,3,3',5-TeCB	57	—	—	U	—	1.33
2,3,3',5'-TeCB	58	—	—	U	—	1.37
2,3,3',6-TeCB	59	59 + 62 + 75	0.795	C K J	U	0.602
2,3,4,4'-TeCB	60	—	2.40	K B J	U	1.4
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	18.8	C B	—	1.32
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.3
2,3,4',6-TeCB	64	—	4.19	B	—	0.579
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	10.4	B	—	1.28
2,3',4,5-TeCB	67	—	—	U	—	1.18
2,3',4,5'-TeCB	68	—	61.3	—	R1	1.3
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.22
2,3',5',6-TeCB	73	—	—	U	—	0.619
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.68	K B J	U	1.34
3,3',4,5-TeCB	78	—	—	U	—	1.42
3,3',4,5'-TeCB	79	—	—	U	—	1.17
3,3',5,5'-TeCB	80	—	—	U	—	1.27
3,4,4',5-TeCB	81	—	—	U	—	1.31
2,2',3,3',4-PeCB	82	—	3.35	K J	U	1.74
2,2',3,3',5-PeCB	83	83 + 99	19.4	C B	—	1.6
2,2',3,3',6-PeCB	84	—	6.63	—	—	1.79
2,2',3,4,4'-PeCB	85	85 + 116 + 117	6.51	C K	U	1.3
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	19.5	C B	—	1.36
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.53	C J	—	1.55
2,2',3,4,6'-PeCB	89	—	—	U	—	1.65
2,2',3,4',5-PeCB	90	90 + 101 + 113	33.2	C B	—	1.37
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	6.91	B	—	1.59
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	21.5	C B	—	1.51
2,2',3,5,6'-PeCB	94	—	—	U	—	1.69

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-2		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.951
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.36
2,2',4,6,6'-PeCB	104	—	—	U	—	1.04
2,3,3',4,4'-PeCB	105	—	13.3	B	—	1.1
2,3,3',4,5-PeCB	106	—	—	U	—	1.15
2,3,3',4',5-PeCB	107	107 + 124	1.61	C K J	U	1.27
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	2.41	K J	U	1.14
2,3,3',4',6-PeCB	110	110 + 115	37.6	C B	—	1.15
2,3,3',5,5'-PeCB	111	—	—	U	—	1.17
2,3,3',5,6-PeCB	112	—	—	U	—	1.12
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	1.07
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	29.6	B	—	1.04
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	1.08
2,3',4,5',6-PeCB	121	—	—	U	—	1.16
2',3,3',4,5-PeCB	122	—	—	U	—	1.34
2',3,4,4',5-PeCB	123	—	—	U	—	1.07
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	1.12
3,3',4,5,5'-PeCB	127	—	—	U	—	1.24
2,2',3,3',4,4'-HxCB	128	128 + 166	8.32	C	—	1.36
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	55.4	C B	—	1.37
2,2',3,3',4,5'-HxCB	130	—	3.11	J	—	1.73
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.64
2,2',3,3',4,6'-HxCB	132	—	15.4	K	U	1.7
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.6
2,2',3,3',5,6-HxCB	134	134 + 143	2.53	C J	—	1.65
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	15.4	C B	—	1.41
2,2',3,3',6,6'-HxCB	136	—	4.15	J	—	1.08
2,2',3,4,4',5-HxCB	137	—	2.66	J	—	1.6
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.5
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	10.1	—	—	1.48

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-2		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.68
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.50	J	—	1.38
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1.15
2,2',3,4',5,5'-HxCB	146	—	7.33	—	—	1.39
2,2',3,4',5,6-HxCB	147	147 + 149	33.0	C	—	1.47
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.48
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	1.07
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	1.04
2,2',4,4',5,5'-HxCB	153	153 + 168	50.2	C B	—	1.22
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.87
2,3,3',4,4',5-HxCB	156	156 + 157	5.53	C J	—	1.35
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	5.23	K	U	1.06
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.13
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	1.1
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.2
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	4.39	—	—	1.17
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.29
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	3.05	J	—	1.02
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.07
2,2',3,3',4,4',5-HpCB	170	—	16.3	—	—	1.46
2,2',3,3',4,4',6-HpCB	171	171 + 173	4.29	C K	U	1.35
2,2',3,3',4,5,5'-HpCB	172	—	3.54	J	—	1.35
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	13.7	—	—	1.22
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.21
2,2',3,3',4,6,6'-HpCB	176	—	1.35	K J	U	0.892
2,2',3,3',4',5,6-HpCB	177	—	7.20	—	—	1.31
2,2',3,3',5,5',6-HpCB	178	—	3.04	K J	U	1.26
2,2',3,3',5,6,6'-HpCB	179	—	4.30	K	U	0.87
2,2',3,4,4',5,5'-HpCB	180	180 + 193	37.3	C B	—	1.09
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.27
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.21
2,2',3,4,4',5',6-HpCB	183	183 + 185	11.9	C	—	1.2
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.868
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.965
2,2',3,4',5,5',6-HpCB	187	—	17.4	—	—	1.16
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.868

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-2		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.724
2,3,3',4,4',5,6-HpCB	190	—	3.03	K J	U	0.985
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.975
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.08
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	10.9	—	—	1.01
2,2',3,3',4,4',5,6-OcCB	195	—	3.75	K J	U	1.07
2,2',3,3',4,4',5,6'-OcCB	196	—	5.05	—	—	1.17
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.98	C K J	U	0.836
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	11.4	C	—	1.22
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	1.01	K J	U	0.813
2,2',3,3',5,5',6,6'-OcCB	202	—	2.03	J	—	0.957
2,2',3,4,4',5,5',6-OcCB	203	—	6.69	—	—	1.13
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.833
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.71
2,2',3,3',4,4',5,5',6-NoCB	206	—	4.19	K J	U	1.61
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.26
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.27	K J	U	1.24
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.54	B J	—	1.01
Total PCBs	—	—	656	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		KC Sample ID: L55434-3	Collection Date: 10/31/2012		Replicate of L55434-2	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	4.45	B	U	0.267
3-MoCB	2	—	3.03	B J	U	0.31
4-MoCB	3	—	4.38	K B	U	0.309
2,2'-DiCB	4	—	2.85	J	—	2.08
2,3-DiCB	5	—	—	U	—	1.67
2,3'-DiCB	6	—	—	U	—	1.5
2,4-DiCB	7	—	—	U	—	1.54
2,4'-DiCB	8	—	2.89	K J	U	1.4
2,5-DiCB	9	—	—	U	—	1.48
2,6-DiCB	10	—	—	U	—	1.52
3,3'-DiCB	11	—	11.2	B	—	1.71
3,4-DiCB	12	12 + 13	—	C U	—	1.67
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.57
4,4'-DiCB	15	—	2.72	J	—	1.77
2,2',3-TriCB	16	—	2.70	K J	U	0.869
2,2',4-TriCB	17	—	4.97	—	—	0.731
2,2',5-TriCB	18	18 + 30	4.26	C B	U	0.605
2,2',6-TriCB	19	—	1.27	K J	U	0.776
2,3,3'-TriCB	20	20 + 28	8.32	C B	U	0.414
2,3,4-TriCB	21	21 + 33	4.32	C B	—	0.387
2,3,4'-TriCB	22	—	1.83	B J	U	0.45
2,3,5-TriCB	23	—	—	U	—	0.424
2,3,6-TriCB	24	—	—	U	—	0.543
2,3',4-TriCB	25	—	1.38	J	—	0.343
2,3',5-TriCB	26	26 + 29	1.21	C B J	U	0.41
2,3',6-TriCB	27	—	0.559	K J	U	0.492
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	U	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.59	B	U	0.386
2,4',6-TriCB	32	—	1.58	K B J	U	0.378
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.427
3,3',4-TriCB	35	—	—	U	—	0.471
3,3',5-TriCB	36	—	—	U	—	0.418
3,4,4'-TriCB	37	—	2.14	K B J	U	0.43
3,4,5-TriCB	38	—	—	U	—	0.412
3,4',5-TriCB	39	—	—	U	—	0.412
2,2',3,3'-TeCB	40	40 + 41 + 71	4.89	C B	—	0.707
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.94	J	—	0.733
2,2',3,5-TeCB	43	—	—	U	—	0.848
2,2',3,5'-TeCB	44	44 + 47 + 65	88.0	C B	R1	0.636
2,2',3,6-TeCB	45	45 + 51	40.4	C	R1	0.686
2,2',3,6'-TeCB	46	—	—	U	—	0.811
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-3	**Collection Date:** 10/31/2012		**Replicate of L55434-2**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.37	J	—	0.708
2,2',4,5'-TeCB	49	49 + 69	7.06	C B	—	0.588
2,2',4,6-TeCB	50	50 + 53	1.92	C K J	U	0.66
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	12.7	B	—	0.656
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.448
2,3,3',4-TeCB	55	—	—	U	—	0.804
2,3,3',4'-TeCB	56	—	3.45	B J	U	0.802
2,3,3',5-TeCB	57	—	—	U	—	0.735
2,3,3',5'-TeCB	58	—	—	U	—	0.751
2,3,3',6-TeCB	59	59 + 62 + 75	1.06	C J	—	0.514
2,3,4,4'-TeCB	60	—	1.56	B J	—	0.795
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	14.7	C B	—	0.733
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.711
2,3,4',6-TeCB	64	—	3.42	B J	—	0.496
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	6.97	B	—	0.735
2,3',4,5-TeCB	67	—	—	U	—	0.648
2,3',4,5'-TeCB	68	—	102	—	R1	0.699
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.692
2,3',5',6-TeCB	73	—	—	U	—	0.513
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.87	K B J	U	0.759
3,3',4,5-TeCB	78	—	—	U	—	0.787
3,3',4,5'-TeCB	79	—	—	U	—	0.625
3,3',5,5'-TeCB	80	—	—	U	—	0.691
3,4,4',5-TeCB	81	—	—	U	—	0.751
2,2',3,3',4-PeCB	82	—	2.40	K J	U	1.09
2,2',3,3',5-PeCB	83	83 + 99	12.5	C B	—	0.954
2,2',3,3',6-PeCB	84	—	5.23	—	—	1.09
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.45	C	—	0.799
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	16.6	C B	—	0.82
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.49	C K J	U	0.944
2,2',3,4,6'-PeCB	89	—	—	U	—	0.991
2,2',3,4',5-PeCB	90	90 + 101 + 113	25.0	C B	—	0.798
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	4.10	K B J	U	0.908
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	19.1	C B	—	0.902
2,2',3,5,6'-PeCB	94	—	—	U	—	1.01

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-3	**Collection Date:** 10/31/2012		**Replicate of L55434-2**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.645
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.808
2,2',4,6,6'-PeCB	104	—	—	U	—	0.568
2,3,3',4,4'-PeCB	105	—	10.8	B	—	0.906
2,3,3',4,5-PeCB	106	—	—	U	—	0.865
2,3,3',4',5-PeCB	107	107 + 124	1.19	C J	—	0.916
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.72	J	—	0.908
2,3,3',4',6-PeCB	110	110 + 115	29.7	C B	—	0.707
2,3,3',5,5'-PeCB	111	—	—	U	—	0.722
2,3,3',5,6-PeCB	112	—	—	U	—	0.704
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.834
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	24.9	B	—	0.869
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.674
2,3',4,5',6-PeCB	121	—	—	U	—	0.696
2',3,3',4,5-PeCB	122	—	—	U	—	0.977
2',3,4,4',5-PeCB	123	—	—	U	—	0.896
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.975
3,3',4,5,5'-PeCB	127	—	—	U	—	0.917
2,2',3,3',4,4'-HxCB	128	128 + 166	7.10	C	—	1.17
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	50.0	C B	—	1.16
2,2',3,3',4,5'-HxCB	130	—	2.83	K J	U	1.5
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.41
2,2',3,3',4,6'-HxCB	132	—	14.1	—	—	1.43
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.38
2,2',3,3',5,6-HxCB	134	134 + 143	2.16	C J	—	1.39
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	13.9	C B	—	0.955
2,2',3,3',6,6'-HxCB	136	—	4.08	J	—	0.692
2,2',3,4,4',5-HxCB	137	—	1.65	K J	U	1.31
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.24
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	10.9	—	—	1.28

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-3	**Collection Date:** 10/31/2012		**Replicate of L55434-2**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.37
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.73	J	—	0.966
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.743
2,2',3,4',5,5'-HxCB	146	—	8.30	K	U	1.2
2,2',3,4',5,6-HxCB	147	147 + 149	32.3	C	—	1.23
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.981
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.689
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.646
2,2',4,4',5,5'-HxCB	153	153 + 168	45.0	C B	—	1.04
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.554
2,3,3',4,4',5-HxCB	156	156 + 157	4.65	C J	—	1.08
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	4.93	K	U	0.88
2,3,3',4,5,5'-HxCB	159	—	1.10	K J	U	0.958
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.952
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.959
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	3.87	J	—	1.01
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.08
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.13	J	—	0.857
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.932
2,2',3,3',4,4',5-HpCB	170	—	15.4	—	—	1.32
2,2',3,3',4,4',6-HpCB	171	171 + 173	4.12	C J	—	1.24
2,2',3,3',4,5,5'-HpCB	172	—	2.93	K J	U	1.27
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	15.2	—	—	1.13
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.07
2,2',3,3',4,6,6'-HpCB	176	—	1.93	K J	U	0.806
2,2',3,3',4',5,6-HpCB	177	—	8.11	—	—	1.16
2,2',3,3',5,5',6-HpCB	178	—	2.69	J	—	1.12
2,2',3,3',5,6,6'-HpCB	179	—	5.00	—	—	0.788
2,2',3,4,4',5,5'-HpCB	180	180 + 193	35.1	C B	—	1.01
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.16
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.1
2,2',3,4,4',5',6-HpCB	183	183 + 185	9.94	C	—	1.11
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.793
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.855
2,2',3,4',5,5',6-HpCB	187	—	19.1	—	—	1.05
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.714

Table B2-10. PCB Congener AXYS Analytical Data for Black River (PS317) - Storm Events

AXYS Workgroup: WG42168		**KC Sample ID:** L55434-3	**Collection Date:** 10/31/2012		**Replicate of L55434-2**	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.716
2,3,3',4,4',5,6-HpCB	190	—	3.52	J	—	0.901
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.884
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.974
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	8.94	—	—	1.18
2,2',3,3',4,4',5,6-OcCB	195	—	3.89	J	—	1.27
2,2',3,3',4,4',5,6'-OcCB	196	—	4.66	—	—	1.32
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	1.58	C K J G	U	0.901
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	10.6	C	—	1.3
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	1.50	K J	U	0.907
2,2',3,3',5,5',6,6'-OcCB	202	—	2.27	K J	U	0.899
2,2',3,4,4',5,5',6-OcCB	203	—	7.21	—	—	1.21
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.898
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.914
2,2',3,3',4,4',5,5',6-NoCB	206	—	3.90	K J	U	1.55
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.18
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.18
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.39	B J	—	1.08
Total PCBs	—	—	582	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present
D = Sample diluted

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-2		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.00	B J	U	0.548
3-MoCB	2	—	1.05	K B J	U	0.548
4-MoCB	3	—	2.85	B J	U	0.548
2,2'-DiCB	4	—	3.30	J	—	3.16
2,3-DiCB	5	—	—	U	—	2.84
2,3'-DiCB	6	—	—	U	—	2.56
2,4-DiCB	7	—	—	U	—	2.6
2,4'-DiCB	8	—	4.61	B J	U	2.36
2,5-DiCB	9	—	—	U	—	2.51
2,6-DiCB	10	—	—	U	—	2.47
3,3'-DiCB	11	—	18.7	B J	U	2.75
3,4-DiCB	12	12 + 13	—	C U	—	2.79
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.7
4,4'-DiCB	15	—	2.66	B J	U	2.56
2,2',3-TriCB	16	—	2.32	K B J	U	0.548
2,2',4-TriCB	17	—	2.56	K B J	U	0.548
2,2',5-TriCB	18	18 + 30	5.07	C B J	U	0.548
2,2',6-TriCB	19	—	0.915	J	—	0.548
2,3,3'-TriCB	20	20 + 28	6.26	C B J	U	0.548
2,3,4-TriCB	21	21 + 33	3.52	C B J	U	0.548
2,3,4'-TriCB	22	—	2.45	B J	U	0.548
2,3,5-TriCB	23	—	—	U	—	0.548
2,3,6-TriCB	24	—	—	U	—	0.548
2,3',4-TriCB	25	—	0.562	K J	U	0.548
2,3',5-TriCB	26	26 + 29	1.10	C J	—	0.548
2,3',6-TriCB	27	—	0.699	K J	U	0.548
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.97	B J	U	0.548
2,4',6-TriCB	32	—	1.56	K B J	U	0.548
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.548
3,3',4-TriCB	35	—	—	U	—	0.548
3,3',5-TriCB	36	—	—	U	—	0.548
3,4,4'-TriCB	37	—	1.79	B J	U	0.548
3,4,5-TriCB	38	—	—	U	—	0.548
3,4',5-TriCB	39	—	—	U	—	0.548
2,2',3,3'-TeCB	40	40 + 41 + 71	3.37	C B J	U	0.548
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.58	B J	—	0.548
2,2',3,5-TeCB	43	—	—	U	—	0.548
2,2',3,5'-TeCB	44	44 + 47 + 65	39.1	C B	R1	0.548
2,2',3,6-TeCB	45	45 + 51	15.8	C B J	R1	0.548
2,2',3,6'-TeCB	46	—	—	U	—	0.548
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-2		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.21	K B J	U	0.548
2,2',4,5'-TeCB	49	49 + 69	4.68	C K B J	U	0.548
2,2',4,6-TeCB	50	50 + 53	1.12	C B J	U	0.548
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	11.1	K B J	U	0.548
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.548
2,3,3',4-TeCB	55	—	—	U	—	0.548
2,3,3',4'-TeCB	56	—	3.14	B J	—	0.548
2,3,3',5-TeCB	57	—	—	U	—	0.548
2,3,3',5'-TeCB	58	—	—	U	—	0.548
2,3,3',6-TeCB	59	59 + 62 + 75	0.604	C J	—	0.548
2,3,4,4'-TeCB	60	—	1.63	B J	U	0.548
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	11.8	C B J	U	0.548
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.548
2,3,4',6-TeCB	64	—	2.54	B J	—	0.548
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.09	B J	U	0.548
2,3',4,5-TeCB	67	—	—	U	—	0.548
2,3',4,5'-TeCB	68	—	17.9	J	R1	0.548
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.548
2,3',5',6-TeCB	73	—	—	U	—	0.548
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.41	B J	U	0.548
3,3',4,5-TeCB	78	—	—	U	—	0.548
3,3',4,5'-TeCB	79	—	—	U	—	0.548
3,3',5,5'-TeCB	80	—	—	U	—	0.548
3,4,4',5-TeCB	81	—	0.749	J	—	0.548
2,2',3,3',4-PeCB	82	—	2.03	B J	—	0.548
2,2',3,3',5-PeCB	83	83 + 99	6.94	C B J	—	0.548
2,2',3,3',6-PeCB	84	—	4.74	B J	U	0.548
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.58	C K B J	U	0.548
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	11.4	C B J	—	0.548
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.19	C K B J	U	0.548
2,2',3,4,6'-PeCB	89	—	—	U	—	0.548
2,2',3,4',5-PeCB	90	90 + 101 + 113	13.0	C B J	U	0.548
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.88	K B J	U	0.548
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	11.5	C B J	U	0.548
2,2',3,5,6'-PeCB	94	—	—	U	—	0.548

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-2		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.548
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.548
2,2',4,6,6'-PeCB	104	—	—	U	—	0.548
2,3,3',4,4'-PeCB	105	—	4.98	K B J	U	0.548
2,3,3',4,5-PeCB	106	—	—	U	—	0.548
2,3,3',4',5-PeCB	107	107 + 124	0.823	C J	—	0.548
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.671	K J	U	0.548
2,3,3',4',6-PeCB	110	110 + 115	16.4	C B J	U	0.548
2,3,3',5,5'-PeCB	111	—	—	U	—	0.548
2,3,3',5,6-PeCB	112	—	—	U	—	0.548
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.19	J	—	0.548
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	8.73	B J	U	0.548
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.548
2,3',4,5',6-PeCB	121	—	—	U	—	0.548
2',3,3',4,5-PeCB	122	—	—	U	—	0.548
2',3,4,4',5-PeCB	123	—	0.846	K J	U	0.548
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.02	K J	U	0.548
3,3',4,5,5'-PeCB	127	—	—	U	—	0.548
2,2',3,3',4,4'-HxCB	128	128 + 166	2.98	C J	—	0.548
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	13.6	C B J	—	0.548
2,2',3,3',4,5'-HxCB	130	—	1.06	K B J	U	0.548
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.548
2,2',3,3',4,6'-HxCB	132	—	4.90	J	—	0.548
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.548
2,2',3,3',5,6-HxCB	134	134 + 143	1.30	C J	—	0.548
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.31	C J	—	0.548
2,2',3,3',6,6'-HxCB	136	—	1.58	K J	U	0.548
2,2',3,4,4',5-HxCB	137	—	0.837	K J	U	0.548
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.548
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.30	J	—	0.548

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-2		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.548
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.555	J	—	0.548
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.548
2,2',3,4',5,5'-HxCB	146	—	1.59	J	—	0.548
2,2',3,4',5,6-HxCB	147	147 + 149	8.93	C B J	U	0.548
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.548
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.548
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.548
2,2',4,4',5,5'-HxCB	153	153 + 168	8.99	C B J	—	0.548
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.548
2,3,3',4,4',5-HxCB	156	156 + 157	3.09	C K B J	U	0.548
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.88	K J	U	0.548
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.548
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.548
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.548
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.02	K J	U	0.548
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.548
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.15	J	—	0.548
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	0.772	J	—	0.548
2,2',3,3',4,4',5-HpCB	170	—	2.90	K B J	U	0.548
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.548
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.548
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.03	B J	—	0.548
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.548
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.548
2,2',3,3',4',5,6-HpCB	177	—	1.04	K J	U	0.548
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.548
2,2',3,3',5,6,6'-HpCB	179	—	0.883	J	—	0.548
2,2',3,4,4',5,5'-HpCB	180	180 + 193	4.16	C B J	—	0.548
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.548
2,2',3,4,4',5,6'-HpCB	182	—	0.919	J	—	0.548
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.66	C K B J	U	0.548
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.548
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.548
2,2',3,4',5,5',6-HpCB	187	—	3.79	B J	U	0.548
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.548

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54147-2		**Collection Date:** 9/13/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	0.952	K J	U	0.548
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.548
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.548
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.548
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.43	B J	—	0.548
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.548
2,2',3,3',4,4',5,6'-OcCB	196	—	0.954	K J	U	0.548
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.548
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.20	C K B J	U	0.548
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.548
2,2',3,3',5,5',6,6'-OcCB	202	—	0.898	J	—	0.548
2,2',3,4,4',5,5',6-OcCB	203	—	1.03	K B J	U	0.548
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.548
2,3,3',4,4',5,5',6-OcCB	205	—	0.782	J	—	0.548
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.72	J	—	0.933
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.811
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.25	J	—	0.771
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.74	K B J	U	0.548
Total PCBs	—	—	92.8	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-1		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.06	B J	U	0.559
3-MoCB	2	—	1.66	K B J	U	0.559
4-MoCB	3	—	3.27	B J	U	0.559
2,2'-DiCB	4	—	4.00	J	—	3.19
2,3-DiCB	5	—	—	U	—	2.63
2,3'-DiCB	6	—	—	U	—	2.37
2,4-DiCB	7	—	—	U	—	2.4
2,4'-DiCB	8	—	4.17	B J	U	2.18
2,5-DiCB	9	—	—	U	—	2.33
2,6-DiCB	10	—	—	U	—	2.29
3,3'-DiCB	11	—	15.2	B J	U	2.54
3,4-DiCB	12	12 + 13	—	C U	—	2.58
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.5
4,4'-DiCB	15	—	3.97	B J	U	2.25
2,2',3-TriCB	16	—	1.92	B J	U	0.559
2,2',4-TriCB	17	—	2.43	B J	U	0.559
2,2',5-TriCB	18	18 + 30	5.44	C B J	U	0.559
2,2',6-TriCB	19	—	1.26	J	—	0.559
2,3,3'-TriCB	20	20 + 28	7.65	C B J	U	0.559
2,3,4-TriCB	21	21 + 33	3.12	C B J	U	0.559
2,3,4'-TriCB	22	—	2.96	B J	U	0.559
2,3,5-TriCB	23	—	—	U	—	0.559
2,3,6-TriCB	24	—	—	U	—	0.559
2,3',4-TriCB	25	—	—	U	—	0.559
2,3',5-TriCB	26	26 + 29	0.854	C K J	U	0.559
2,3',6-TriCB	27	—	0.570	K J	U	0.559
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.92	B J	U	0.559
2,4',6-TriCB	32	—	1.48	B J	U	0.559
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.559
3,3',4-TriCB	35	—	0.585	K J	U	0.559
3,3',5-TriCB	36	—	—	U	—	0.559
3,4,4'-TriCB	37	—	3.33	B J	U	0.559
3,4,5-TriCB	38	—	—	U	—	0.559
3,4',5-TriCB	39	—	—	U	—	0.559
2,2',3,3'-TeCB	40	40 + 41 + 71	3.57	C B J	U	0.559
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.64	B J	—	0.559
2,2',3,5-TeCB	43	—	—	U	—	0.559
2,2',3,5'-TeCB	44	44 + 47 + 65	21.5	C B J	R1	0.559
2,2',3,6-TeCB	45	45 + 51	10.7	C B J	R1	0.559
2,2',3,6'-TeCB	46	—	0.849	K J	U	0.559
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-1		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.627	K B J	U	0.559
2,2',4,5'-TeCB	49	49 + 69	3.50	C K B J	U	0.559
2,2',4,6-TeCB	50	50 + 53	1.08	C K B J	U	0.559
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.94	K B J	U	0.559
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.559
2,3,3',4-TeCB	55	—	—	U	—	0.662
2,3,3',4'-TeCB	56	—	3.89	B J	—	0.657
2,3,3',5-TeCB	57	—	—	U	—	0.617
2,3,3',5'-TeCB	58	—	—	U	—	0.616
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.559
2,3,4,4'-TeCB	60	—	1.87	B J	U	0.66
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	10.9	C B J	U	0.615
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.6
2,3,4',6-TeCB	64	—	3.22	K B J	U	0.559
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.28	B J	U	0.606
2,3',4,5-TeCB	67	—	—	U	—	0.559
2,3',4,5'-TeCB	68	—	7.09	J	R1	0.598
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.593
2,3',5',6-TeCB	73	—	—	U	—	0.559
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	2.18	B J	U	0.559
3,3',4,5-TeCB	78	—	—	U	—	0.668
3,3',4,5'-TeCB	79	—	—	U	—	0.559
3,3',5,5'-TeCB	80	—	—	U	—	0.574
3,4,4',5-TeCB	81	—	1.32	J	—	0.628
2,2',3,3',4-PeCB	82	—	3.49	K B J	U	0.745
2,2',3,3',5-PeCB	83	83 + 99	4.59	C B J	—	0.698
2,2',3,3',6-PeCB	84	—	5.50	K B J	U	0.745
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.19	C K B J	U	0.602
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	14.5	C B J	—	0.602
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.53	C K B J	U	0.66
2,2',3,4,6'-PeCB	89	—	—	U	—	0.705
2,2',3,4',5-PeCB	90	90 + 101 + 113	11.5	C B J	U	0.602
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.40	B J	—	0.678
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	13.6	C B J	U	0.644
2,2',3,5,6'-PeCB	94	—	—	U	—	0.717

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54148-1		Collection Date: 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.559
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.599
2,2',4,6,6'-PeCB	104	—	—	U	—	0.559
2,3,3',4,4'-PeCB	105	—	5.47	K B J	U	0.559
2,3,3',4,5-PeCB	106	—	—	U	—	0.775
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.868
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.01	K J	U	0.853
2,3,3',4',6-PeCB	110	110 + 115	23.8	C B	U	0.559
2,3,3',5,5'-PeCB	111	—	—	U	—	0.559
2,3,3',5,6-PeCB	112	—	—	U	—	0.559
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	1.66	J	—	0.771
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	11.5	B J	U	0.814
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.559
2,3',4,5',6-PeCB	121	—	—	U	—	0.559
2',3,3',4,5-PeCB	122	—	—	U	—	0.893
2',3,4,4',5-PeCB	123	—	1.11	J	—	0.854
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	1.47	J	—	0.631
3,3',4,5,5'-PeCB	127	—	—	U	—	0.82
2,2',3,3',4,4'-HxCB	128	128 + 166	3.55	C K J	U	0.627
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	16.4	C K B J	U	0.63
2,2',3,3',4,5'-HxCB	130	—	1.26	K B J	U	0.777
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.701
2,2',3,3',4,6'-HxCB	132	—	8.19	K J	U	0.736
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.676
2,2',3,3',5,6-HxCB	134	134 + 143	1.53	C K J	U	0.722
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.21	C J	J	0.559
2,2',3,3',6,6'-HxCB	136	—	2.27	K J	U	0.559
2,2',3,4,4',5-HxCB	137	—	1.11	K J	U	0.764
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.665
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.24	J	J	0.645

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-1		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.732
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	1.22	K J	U	0.559
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.559
2,2',3,4',5,5'-HxCB	146	—	0.876	K J	U	0.627
2,2',3,4',5,6-HxCB	147	147 + 149	11.7	C B J	J	0.658
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.559
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.559
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.559
2,2',4,4',5,5'-HxCB	153	153 + 168	7.87	C B J	J	0.559
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	1.60	K J	U	0.572
2,3,3',4,4',5-HxCB	156	156 + 157	4.20	C B J	J	0.559
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.23	K J	U	0.559
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.559
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.559
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.567
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.08	J	J	0.559
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.591
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	2.60	J	J	0.583
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	1.14	J	J	0.559
2,2',3,3',4,4',5-HpCB	170	—	7.77	B J	J	0.927
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.56	C K J	U	0.888
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.895
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.85	B J	J	0.788
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.79
2,2',3,3',4,6,6'-HpCB	176	—	0.764	K J	U	0.604
2,2',3,3',4',5,6-HpCB	177	—	2.15	J	J	0.809
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.79
2,2',3,3',5,6,6'-HpCB	179	—	1.92	K J	U	0.584
2,2',3,4,4',5,5'-HpCB	180	180 + 193	6.12	C B J	J	0.751
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.85
2,2',3,4,4',5,6'-HpCB	182	—	2.44	J	J	0.789
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.67	C B J	J	0.819
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.577
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.639
2,2',3,4',5,5',6-HpCB	187	—	5.72	B J	J	0.748
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.585

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54148-1		**Collection Date:** 9/14/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	2.08	J	J	0.561
2,3,3',4,4',5,6-HpCB	190	—	0.942	K J	U	0.73
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.695
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.781
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	2.42	K B J	U	0.774
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.83
2,2',3,3',4,4',5,6'-OcCB	196	—	1.85	K J	U	0.747
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.631	C K J	U	0.559
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.65	C K B J	U	0.761
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.559
2,2',3,3',5,5',6,6'-OcCB	202	—	1.94	K J	U	0.559
2,2',3,4,4',5,5',6-OcCB	203	—	1.32	K B J	U	0.721
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.559
2,3,3',4,4',5,5',6-OcCB	205	—	1.65	K J	U	0.604
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.28
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.08
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.05
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	3.15	K B J	U	0.828
Total PCBs	—	—	106	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		KC Sample ID: L54149-1		Collection Date: 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.21	B J	U	0.56
3-MoCB	2	—	1.79	B J	U	0.667
4-MoCB	3	—	3.27	B J	U	0.573
2,2'-DiCB	4	—	—	U	—	3.13
2,3-DiCB	5	—	—	U	—	3.06
2,3'-DiCB	6	—	—	U	—	2.76
2,4-DiCB	7	—	5.06	B J	U	2.8
2,4'-DiCB	8	—	3.51	B J	U	2.54
2,5-DiCB	9	—	—	U	—	2.71
2,6-DiCB	10	—	—	U	—	2.66
3,3'-DiCB	11	—	14.6	B J	U	2.96
3,4-DiCB	12	12 + 13	—	C U	—	3.01
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.91
4,4'-DiCB	15	—	—	U	—	2.91
2,2',3-TriCB	16	—	2.86	K B J	U	0.775
2,2',4-TriCB	17	—	2.61	K B J	U	0.676
2,2',5-TriCB	18	18 + 30	5.63	C B J	U	0.568
2,2',6-TriCB	19	—	1.06	K J	U	0.56
2,3,3'-TriCB	20	20 + 28	6.86	C B J	U	0.56
2,3,4-TriCB	21	21 + 33	2.69	C B J	U	0.56
2,3,4'-TriCB	22	—	2.90	B J	U	0.56
2,3,5-TriCB	23	—	—	U	—	0.56
2,3,6-TriCB	24	—	—	U	—	0.56
2,3',4-TriCB	25	—	—	U	—	0.56
2,3',5-TriCB	26	26 + 29	1.43	C J	—	0.56
2,3',6-TriCB	27	—	—	U	—	0.56
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	5.15	B J	U	0.56
2,4',6-TriCB	32	—	1.56	B J	U	0.56
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.56
3,3',4-TriCB	35	—	—	U	—	0.56
3,3',5-TriCB	36	—	—	U	—	0.56
3,4,4'-TriCB	37	—	1.45	K B J	U	0.56
3,4,5-TriCB	38	—	—	U	—	0.56
3,4',5-TriCB	39	—	—	U	—	0.56
2,2',3,3'-TeCB	40	40 + 41 + 71	3.35	C K B J	U	0.56
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.56	K B J	U	0.56
2,2',3,5-TeCB	43	—	—	U	—	0.56
2,2',3,5'-TeCB	44	44 + 47 + 65	28.8	C B	R1	0.56
2,2',3,6-TeCB	45	45 + 51	10.0	C B J	R1	0.56
2,2',3,6'-TeCB	46	—	0.635	J	—	0.56
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-1		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.09	K B J	U	0.56
2,2',4,5'-TeCB	49	49 + 69	4.22	C B J	U	0.56
2,2',4,6-TeCB	50	50 + 53	1.15	C B J	U	0.56
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	9.91	B J	—	0.56
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.56
2,3,3',4-TeCB	55	—	—	U	—	0.758
2,3,3',4'-TeCB	56	—	2.54	K B J	U	0.752
2,3,3',5-TeCB	57	—	—	U	—	0.706
2,3,3',5'-TeCB	58	—	—	U	—	0.706
2,3,3',6-TeCB	59	59 + 62 + 75	1.11	C K J	U	0.56
2,3,4,4'-TeCB	60	—	1.04	K B J	U	0.756
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	11.5	C B J	U	0.704
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.688
2,3,4',6-TeCB	64	—	2.13	K B J	U	0.56
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	4.17	B J	U	0.694
2,3',4,5-TeCB	67	—	—	U	—	0.616
2,3',4,5'-TeCB	68	—	31.0	—	R1	0.685
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.679
2,3',5',6-TeCB	73	—	—	U	—	0.56
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.668
3,3',4,5-TeCB	78	—	—	U	—	0.765
3,3',4,5'-TeCB	79	—	—	U	—	0.592
3,3',5,5'-TeCB	80	—	—	U	—	0.657
3,4,4',5-TeCB	81	—	—	U	—	0.662
2,2',3,3',4-PeCB	82	—	—	U	—	0.659
2,2',3,3',5-PeCB	83	83 + 99	5.05	C B J	—	0.617
2,2',3,3',6-PeCB	84	—	3.43	K B J	U	0.659
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.54	C B J	—	0.56
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	8.51	C B J	—	0.56
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.84	C B J	—	0.583
2,2',3,4,6'-PeCB	89	—	—	U	—	0.623
2,2',3,4',5-PeCB	90	90 + 101 + 113	7.90	C B J	U	0.56
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.44	K B J	U	0.6
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	9.06	C K B J	U	0.57
2,2',3,5,6'-PeCB	94	—	—	U	—	0.634

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-1		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.56
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.56
2,2',4,6,6'-PeCB	104	—	—	U	—	0.56
2,3,3',4,4'-PeCB	105	—	3.21	B J	U	0.56
2,3,3',4,5-PeCB	106	—	—	U	—	0.56
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.576
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.592	J	—	0.566
2,3,3',4',6-PeCB	110	110 + 115	12.5	C B J	U	0.56
2,3,3',5,5'-PeCB	111	—	—	U	—	0.56
2,3,3',5,6-PeCB	112	—	—	U	—	0.56
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.56
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.11	B J	U	0.56
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.56
2,3',4,5',6-PeCB	121	—	—	U	—	0.56
2',3,3',4,5-PeCB	122	—	—	U	—	0.593
2',3,4,4',5-PeCB	123	—	—	U	—	0.56
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.56
3,3',4,5,5'-PeCB	127	—	—	U	—	0.56
2,2',3,3',4,4'-HxCB	128	128 + 166	2.05	C J	—	0.56
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	8.55	C B J	—	0.56
2,2',3,3',4,5'-HxCB	130	—	0.825	K B J	U	0.56
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.56
2,2',3,3',4,6'-HxCB	132	—	3.82	K J	U	0.56
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.56
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.56
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.62	C J	—	0.56
2,2',3,3',6,6'-HxCB	136	—	0.940	J	—	0.56
2,2',3,4,4',5-HxCB	137	—	0.777	K J	U	0.56
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.56
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.27	K J	U	0.56

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-1		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.56
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.56
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.56
2,2',3,4',5,5'-HxCB	146	—	1.26	K J	U	0.56
2,2',3,4',5,6-HxCB	147	147 + 149	5.87	C B J	U	0.56
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.56
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.56
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.56
2,2',4,4',5,5'-HxCB	153	153 + 168	6.94	C B J	—	0.56
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.56
2,3,3',4,4',5-HxCB	156	156 + 157	1.41	C B J	—	0.56
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.831	K J	U	0.56
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.56
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.56
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.56
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	0.56
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.56
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.56
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.56
2,2',3,3',4,4',5-HpCB	170	—	1.45	K B J	U	0.56
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	0.56
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.56
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	1.87	K B J	U	0.56
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.56
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.56
2,2',3,3',4',5,6-HpCB	177	—	1.01	K J	U	0.56
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.56
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.56
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.27	C B J	—	0.56
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.56
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.56
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.36	C K B J	U	0.56
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.56
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.56
2,2',3,4',5,5',6-HpCB	187	—	2.57	B J	U	0.56
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.56

Table B2-11. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Baseflow

AXYS Workgroup: WG37726		**KC Sample ID:** L54149-1		**Collection Date:** 9/15/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.56
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.56
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.56
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.56
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.974	K B J	U	0.56
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.56
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.56
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.56
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.60	C K B J	U	0.56
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.56
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.56
2,2',3,4,4',5,5',6-OcCB	203	—	0.836	K B J	U	0.56
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.56
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.56
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	0.973
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.853
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.814
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.53	K B J	U	0.56
Total PCBs	—	—	56.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-4		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.30	B J	U	0.523
3-MoCB	2	—	2.44	B J	U	0.523
4-MoCB	3	—	7.90	B J	U	0.523
2,2'-DiCB	4	—	—	U	—	5.95
2,3-DiCB	5	—	—	U	—	4.62
2,3'-DiCB	6	—	—	U	—	4.19
2,4-DiCB	7	—	—	U	—	4.36
2,4'-DiCB	8	—	—	U	—	4.01
2,5-DiCB	9	—	—	U	—	4.08
2,6-DiCB	10	—	—	U	—	4.23
3,3'-DiCB	11	—	6.99	B J	—	4.51
3,4-DiCB	12	12 + 13	—	C U	—	4.57
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	4.29
4,4'-DiCB	15	—	4.86	K B J	U	4.72
2,2',3-TriCB	16	—	0.980	K J	U	0.91
2,2',4-TriCB	17	—	1.08	K J	U	0.735
2,2',5-TriCB	18	18 + 30	2.41	C K B J	U	0.617
2,2',6-TriCB	19	—	—	U	—	0.634
2,3,3'-TriCB	20	20 + 28	3.45	C B J	U	0.523
2,3,4-TriCB	21	21 + 33	1.08	C B J	U	0.523
2,3,4'-TriCB	22	—	1.02	K B J	U	0.523
2,3,5-TriCB	23	—	—	U	—	0.523
2,3,6-TriCB	24	—	—	U	—	0.554
2,3',4-TriCB	25	—	—	U	—	0.523
2,3',5-TriCB	26	26 + 29	—	C U	—	0.523
2,3',6-TriCB	27	—	—	U	—	0.523
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.32	B J	U	0.523
2,4',6-TriCB	32	—	0.626	J	—	0.523
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.523
3,3',4-TriCB	35	—	—	U	—	0.523
3,3',5-TriCB	36	—	—	U	—	0.523
3,4,4'-TriCB	37	—	1.17	J	—	0.523
3,4,5-TriCB	38	—	—	U	—	0.523
3,4',5-TriCB	39	—	—	U	—	0.523
2,2',3,3'-TeCB	40	40 + 41 + 71	1.18	C K J	U	1.08
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	1.13
2,2',3,5-TeCB	43	—	—	U	—	1.32
2,2',3,5'-TeCB	44	44 + 47 + 65	17.0	C B J	R1	0.993
2,2',3,6-TeCB	45	45 + 51	3.81	C K J	U, R1	1.07
2,2',3,6'-TeCB	46	—	—	U	—	1.24
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-4		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	1.09
2,2',4,5'-TeCB	49	49 + 69	1.92	C K B J	U	0.927
2,2',4,6-TeCB	50	50 + 53	—	C U	—	1.04
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	7.67	B J	U	0.991
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.666
2,3,3',4-TeCB	55	—	—	U	—	1.62
2,3,3',4'-TeCB	56	—	—	U	—	1.57
2,3,3',5-TeCB	57	—	—	U	—	1.53
2,3,3',5'-TeCB	58	—	—	U	—	1.53
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.824
2,3,4,4'-TeCB	60	—	—	U	—	1.59
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.59	C B J	—	1.51
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.44
2,3,4',6-TeCB	64	—	1.77	B J	U	0.793
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.90	B J	U	1.41
2,3',4,5-TeCB	67	—	—	U	—	1.35
2,3',4,5'-TeCB	68	—	15.1	J	R1	1.49
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.46
2,3',5',6-TeCB	73	—	—	U	—	0.803
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.48
3,3',4,5-TeCB	78	—	—	U	—	1.51
3,3',4,5'-TeCB	79	—	—	U	—	1.28
3,3',5,5'-TeCB	80	—	—	U	—	1.38
3,4,4',5-TeCB	81	—	—	U	—	1.44
2,2',3,3',4-PeCB	82	—	0.989	J	—	0.523
2,2',3,3',5-PeCB	83	83 + 99	5.07	C K B J	U	0.523
2,2',3,3',6-PeCB	84	—	2.56	J	—	0.523
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.31	C K J	U	0.523
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	6.90	C B J	—	0.523
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	1.84	C K J	U	0.523
2,2',3,4,6'-PeCB	89	—	—	U	—	0.523
2,2',3,4',5-PeCB	90	90 + 101 + 113	9.48	C B J	—	0.523
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.63	K J	U	0.523
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	9.59	C B J	—	0.523
2,2',3,5,6'-PeCB	94	—	—	U	—	0.523

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-4		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.523
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.523
2,2',4,6,6'-PeCB	104	—	—	U	—	0.523
2,3,3',4,4'-PeCB	105	—	3.41	B J	—	0.523
2,3,3',4,5-PeCB	106	—	—	U	—	0.523
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.523
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	0.810	K J	U	0.523
2,3,3',4',6-PeCB	110	110 + 115	11.9	C B J	—	0.523
2,3,3',5,5'-PeCB	111	—	—	U	—	0.523
2,3,3',5,6-PeCB	112	—	—	U	—	0.523
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.523
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	7.14	B J	—	0.523
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.523
2,3',4,5',6-PeCB	121	—	—	U	—	0.523
2',3,3',4,5-PeCB	122	—	—	U	—	0.523
2',3,4,4',5-PeCB	123	—	—	U	—	0.523
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.523
3,3',4,5,5'-PeCB	127	—	—	U	—	0.523
2,2',3,3',4,4'-HxCB	128	128 + 166	2.39	C K J	U	0.523
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	14.7	C B J	—	0.523
2,2',3,3',4,5'-HxCB	130	—	0.961	J	—	0.523
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.523
2,2',3,3',4,6'-HxCB	132	—	4.83	J	—	0.523
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.523
2,2',3,3',5,6-HxCB	134	134 + 143	0.723	C J	—	0.523
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	3.68	C B J	—	0.523
2,2',3,3',6,6'-HxCB	136	—	1.33	J	—	0.523
2,2',3,4,4',5-HxCB	137	—	0.606	K J	U	0.523
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.523
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.33	J	—	0.523

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-4		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.523
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.523
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.523
2,2',3,4',5,5'-HxCB	146	—	1.52	K J	U	0.523
2,2',3,4',5,6-HxCB	147	147 + 149	9.29	C B J	—	0.523
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.523
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.523
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.523
2,2',4,4',5,5'-HxCB	153	153 + 168	11.2	C B J	—	0.523
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.523
2,3,3',4,4',5-HxCB	156	156 + 157	1.38	C J	—	0.523
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.56	K J	U	0.523
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.523
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.523
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.523
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.01	J	—	0.523
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.523
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.611	J	—	0.523
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.523
2,2',3,3',4,4',5-HpCB	170	—	3.23	J	—	0.523
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.15	C J	—	0.523
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.523
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.12	J	—	0.523
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.523
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.523
2,2',3,3',4',5,6-HpCB	177	—	1.89	J	—	0.523
2,2',3,3',5,5',6-HpCB	178	—	0.553	K J	U	0.523
2,2',3,3',5,6,6'-HpCB	179	—	1.46	J	—	0.523
2,2',3,4,4',5,5'-HpCB	180	180 + 193	6.25	C J	—	0.523
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.523
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.523
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.95	C K J	U	0.523
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.523
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.523
2,2',3,4',5,5',6-HpCB	187	—	3.57	K B J	U	0.523
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.523

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54681-4		**Collection Date:** 11/16/2011		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.523
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.523
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.523
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.523
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.52	K J	U	0.523
2,2',3,3',4,4',5,6-OcCB	195	—	0.628	J	—	0.523
2,2',3,3',4,4',5,6'-OcCB	196	—	1.15	K J	U	0.523
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.523
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.59	C J	—	0.523
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.523
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.523
2,2',3,4,4',5,5',6-OcCB	203	—	1.35	K J	U	0.523
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.523
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.523
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.53
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.68
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.86
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.50	B J	—	0.523
Total PCBs	—	—	141	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-6		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.77	B J	U	0.543
3-MoCB	2	—	1.84	B J	U	0.543
4-MoCB	3	—	5.46	B J	U	0.543
2,2'-DiCB	4	—	—	U	—	2.48
2,3-DiCB	5	—	—	U	—	1.88
2,3'-DiCB	6	—	—	U	—	1.71
2,4-DiCB	7	—	3.24	K B J	U	1.77
2,4'-DiCB	8	—	—	U	—	1.61
2,5-DiCB	9	—	—	U	—	1.7
2,6-DiCB	10	—	—	U	—	1.74
3,3'-DiCB	11	—	11.4	B J	—	1.83
3,4-DiCB	12	12 + 13	—	C U	—	1.85
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.78
4,4'-DiCB	15	—	4.12	B J	U	1.83
2,2',3-TriCB	16	—	1.80	K J	U	0.543
2,2',4-TriCB	17	—	6.89	J	—	0.543
2,2',5-TriCB	18	18 + 30	3.01	C B J	—	0.543
2,2',6-TriCB	19	—	0.593	J	—	0.543
2,3,3'-TriCB	20	20 + 28	6.54	C B J	U	0.543
2,3,4-TriCB	21	21 + 33	9.44	C B J	—	0.543
2,3,4'-TriCB	22	—	1.68	B J	—	0.543
2,3,5-TriCB	23	—	—	U	—	0.543
2,3,6-TriCB	24	—	—	U	—	0.543
2,3',4-TriCB	25	—	2.38	J	—	0.543
2,3',5-TriCB	26	26 + 29	0.681	C J	—	0.543
2,3',6-TriCB	27	—	—	U	—	0.543
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.23	B J	U	0.543
2,4',6-TriCB	32	—	1.07	J	—	0.543
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.543
3,3',4-TriCB	35	—	—	U	—	0.543
3,3',5-TriCB	36	—	—	U	—	0.543
3,4,4'-TriCB	37	—	1.42	J	—	0.543
3,4,5-TriCB	38	—	—	U	—	0.543
3,4',5-TriCB	39	—	—	U	—	0.543
2,2',3,3'-TeCB	40	40 + 41 + 71	2.74	C J	—	0.543
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.48	J	—	0.543
2,2',3,5-TeCB	43	—	—	U	—	0.543
2,2',3,5'-TeCB	44	44 + 47 + 65	793	C B	R1	0.543
2,2',3,6-TeCB	45	45 + 51	220	C	R1	0.543
2,2',3,6'-TeCB	46	—	0.619	K J	U	0.543
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-6		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.665	J	—	0.543
2,2',4,5'-TeCB	49	49 + 69	14.6	C B J	—	0.543
2,2',4,6-TeCB	50	50 + 53	1.07	C J	—	0.543
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.85	B J	U	0.543
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.543
2,3,3',4-TeCB	55	—	—	U	—	0.675
2,3,3',4'-TeCB	56	—	1.95	J	—	0.675
2,3,3',5-TeCB	57	—	—	U	—	0.636
2,3,3',5'-TeCB	58	—	—	U	—	0.646
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.543
2,3,4,4'-TeCB	60	—	0.770	J	—	0.676
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	9.49	C B J	—	0.641
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.612
2,3,4',6-TeCB	64	—	2.10	B J	U	0.543
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.78	B J	—	0.613
2,3',4,5-TeCB	67	—	—	U	—	0.573
2,3',4,5'-TeCB	68	—	453	—	R1	0.611
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.619
2,3',5',6-TeCB	73	—	—	U	—	0.543
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.721	K J	U	0.634
3,3',4,5-TeCB	78	—	—	U	—	0.645
3,3',4,5'-TeCB	79	—	—	U	—	0.564
3,3',5,5'-TeCB	80	—	—	U	—	0.602
3,4,4',5-TeCB	81	—	—	U	—	0.629
2,2',3,3',4-PeCB	82	—	1.34	J	—	0.543
2,2',3,3',5-PeCB	83	83 + 99	11.8	C B J	—	0.543
2,2',3,3',6-PeCB	84	—	4.10	J	—	0.543
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.34	C J	—	0.543
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	10.9	C B J	—	0.543
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	3.43	C J	—	0.543
2,2',3,4,6'-PeCB	89	—	—	U	—	0.543
2,2',3,4',5-PeCB	90	90 + 101 + 113	17.6	C B J	—	0.543
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.97	J	—	0.543
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	12.8	C B J	—	0.543
2,2',3,5,6'-PeCB	94	—	—	U	—	0.543

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-6		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.543
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.543
2,2',4,6,6'-PeCB	104	—	—	U	—	0.543
2,3,3',4,4'-PeCB	105	—	5.89	B J	—	0.543
2,3,3',4,5-PeCB	106	—	—	U	—	0.543
2,3,3',4',5-PeCB	107	107 + 124	0.756	C K J	U	0.543
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.01	J	—	0.543
2,3,3',4',6-PeCB	110	110 + 115	20.3	C B J	—	0.543
2,3,3',5,5'-PeCB	111	—	—	U	—	0.543
2,3,3',5,6-PeCB	112	—	—	U	—	0.543
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.543
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	13.8	B J	—	0.543
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.543
2,3',4,5',6-PeCB	121	—	—	U	—	0.543
2',3,3',4,5-PeCB	122	—	—	U	—	0.543
2',3,4,4',5-PeCB	123	—	—	U	—	0.543
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.543
3,3',4,5,5'-PeCB	127	—	—	U	—	0.543
2,2',3,3',4,4'-HxCB	128	128 + 166	4.23	C J	—	0.543
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	21.9	C B	—	0.543
2,2',3,3',4,5'-HxCB	130	—	1.69	J	—	0.543
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.543
2,2',3,3',4,6'-HxCB	132	—	6.84	J	—	0.543
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.543
2,2',3,3',5,6-HxCB	134	134 + 143	1.32	C J	—	0.543
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.43	C B J	—	0.543
2,2',3,3',6,6'-HxCB	136	—	1.78	J	—	0.543
2,2',3,4,4',5-HxCB	137	—	1.64	J	—	0.543
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	0.883	C K J	U	0.543
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.81	J	—	0.543

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-6		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.543
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.834	K J	U	0.543
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.543
2,2',3,4',5,5'-HxCB	146	—	2.56	J	—	0.543
2,2',3,4',5,6-HxCB	147	147 + 149	14.7	C B J	—	0.543
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.543
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.543
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.543
2,2',4,4',5,5'-HxCB	153	153 + 168	17.2	C B J	—	0.543
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.543
2,3,3',4,4',5-HxCB	156	156 + 157	2.39	C J	—	0.543
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.08	J	—	0.543
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.543
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.543
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.543
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.45	K J	U	0.543
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.543
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.828	K J	U	0.543
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.543
2,2',3,3',4,4',5-HpCB	170	—	3.82	J	—	0.543
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.34	C J	—	0.543
2,2',3,3',4,5,5'-HpCB	172	—	1.14	J	—	0.543
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	4.43	J	—	0.543
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.543
2,2',3,3',4,6,6'-HpCB	176	—	0.580	J	—	0.543
2,2',3,3',4',5,6-HpCB	177	—	3.05	J	—	0.543
2,2',3,3',5,5',6-HpCB	178	—	1.19	J	—	0.543
2,2',3,3',5,6,6'-HpCB	179	—	2.06	J	—	0.543
2,2',3,4,4',5,5'-HpCB	180	180 + 193	9.86	C J	—	0.543
2,2',3,4,4',5,6-HpCB	181	—	0.574	K J	U	0.543
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.543
2,2',3,4,4',5',6-HpCB	183	183 + 185	3.26	C K J	U	0.543
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.543
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.543
2,2',3,4',5,5',6-HpCB	187	—	6.25	B J	—	0.543
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.543

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L54686-6		**Collection Date:** 1/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.543
2,3,3',4,4',5,6-HpCB	190	—	1.05	J	—	0.543
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.543
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.543
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.09	K J	U	0.543
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.543
2,2',3,3',4,4',5,6'-OcCB	196	—	1.42	K J	U	0.543
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.609	C K J G	U	0.543
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.06	C J	—	0.543
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.578	J	—	0.543
2,2',3,3',5,5',6,6'-OcCB	202	—	0.952	K J	U	0.543
2,2',3,4,4',5,5',6-OcCB	203	—	2.80	J	—	0.543
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.543
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.543
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.71
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.01
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.98
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.44	K B J	U	0.543
Total PCBs	—	—	316	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-6		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.31	B J	U	0.519
3-MoCB	2	—	2.48	B J	U	0.519
4-MoCB	3	—	7.41	B J	U	0.519
2,2'-DiCB	4	—	—	U	—	3.63
2,3-DiCB	5	—	—	U	—	2.82
2,3'-DiCB	6	—	—	U	—	2.56
2,4-DiCB	7	—	7.47	B J	U	2.66
2,4'-DiCB	8	—	—	U	—	2.41
2,5-DiCB	9	—	—	U	—	2.54
2,6-DiCB	10	—	—	U	—	2.61
3,3'-DiCB	11	—	9.70	B J	—	2.75
3,4-DiCB	12	12 + 13	—	C U	—	2.78
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.66
4,4'-DiCB	15	—	4.67	B J	U	2.79
2,2',3-TriCB	16	—	1.24	J	—	0.519
2,2',4-TriCB	17	—	5.29	J	—	0.519
2,2',5-TriCB	18	18 + 30	2.11	C B J	—	0.519
2,2',6-TriCB	19	—	0.574	K J	U	0.519
2,3,3'-TriCB	20	20 + 28	4.95	C B J	U	0.519
2,3,4-TriCB	21	21 + 33	3.73	C B J	U	0.519
2,3,4'-TriCB	22	—	1.08	B J	—	0.519
2,3,5-TriCB	23	—	—	U	—	0.519
2,3,6-TriCB	24	—	—	U	—	0.519
2,3',4-TriCB	25	—	1.42	J	—	0.519
2,3',5-TriCB	26	26 + 29	—	C U	—	0.519
2,3',6-TriCB	27	—	—	U	—	0.519
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.20	B J	U	0.519
2,4',6-TriCB	32	—	0.625	J	—	0.519
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.519
3,3',4-TriCB	35	—	—	U	—	0.519
3,3',5-TriCB	36	—	—	U	—	0.519
3,4,4'-TriCB	37	—	0.870	J	—	0.519
3,4,5-TriCB	38	—	—	U	—	0.519
3,4',5-TriCB	39	—	—	U	—	0.519
2,2',3,3'-TeCB	40	40 + 41 + 71	1.26	C K J	U	0.588
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.609
2,2',3,5-TeCB	43	—	—	U	—	0.718
2,2',3,5'-TeCB	44	44 + 47 + 65	98.6	C B	R1	0.542
2,2',3,6-TeCB	45	45 + 51	67.2	C	R1	0.578
2,2',3,6'-TeCB	46	—	—	U	—	0.661
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-6		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.58
2,2',4,5'-TeCB	49	49 + 69	4.64	C B J	—	0.519
2,2',4,6-TeCB	50	50 + 53	0.742	C K J	U	0.564
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	4.08	B J	U	0.542
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.519
2,3,3',4-TeCB	55	—	—	U	—	0.994
2,3,3',4'-TeCB	56	—	1.09	J	—	0.994
2,3,3',5-TeCB	57	—	—	U	—	0.936
2,3,3',5'-TeCB	58	—	—	U	—	0.951
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.519
2,3,4,4'-TeCB	60	—	—	U	—	0.995
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	4.76	C B J	—	0.944
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.9
2,3,4',6-TeCB	64	—	0.880	K B J	U	0.519
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	2.24	B J	U	0.903
2,3',4,5-TeCB	67	—	—	U	—	0.843
2,3',4,5'-TeCB	68	—	88.5	—	R1	0.899
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.91
2,3',5',6-TeCB	73	—	—	U	—	0.519
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.931
3,3',4,5-TeCB	78	—	—	U	—	0.949
3,3',4,5'-TeCB	79	—	—	U	—	0.83
3,3',5,5'-TeCB	80	—	—	U	—	0.886
3,4,4',5-TeCB	81	—	—	U	—	0.914
2,2',3,3',4-PeCB	82	—	0.859	K J	U	0.519
2,2',3,3',5-PeCB	83	83 + 99	4.96	C B J	—	0.519
2,2',3,3',6-PeCB	84	—	2.15	K J	U	0.519
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.11	C K J	U	0.519
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	4.76	C B J	—	0.519
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.04	C J	—	0.519
2,2',3,4,6'-PeCB	89	—	—	U	—	0.519
2,2',3,4',5-PeCB	90	90 + 101 + 113	6.78	C B J	U	0.519
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	1.19	J	—	0.519
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	5.68	C B J	U	0.519
2,2',3,5,6'-PeCB	94	—	—	U	—	0.519

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-6		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.519
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.519
2,2',4,6,6'-PeCB	104	—	—	U	—	0.519
2,3,3',4,4'-PeCB	105	—	2.64	B J	—	0.519
2,3,3',4,5-PeCB	106	—	—	U	—	0.519
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.519
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.519
2,3,3',4',6-PeCB	110	110 + 115	8.65	C B J	—	0.519
2,3,3',5,5'-PeCB	111	—	—	U	—	0.519
2,3,3',5,6-PeCB	112	—	—	U	—	0.519
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.519
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	5.39	B J	U	0.519
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.519
2,3',4,5',6-PeCB	121	—	—	U	—	0.519
2',3,3',4,5-PeCB	122	—	—	U	—	0.519
2',3,4,4',5-PeCB	123	—	—	U	—	0.519
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.519
3,3',4,5,5'-PeCB	127	—	—	U	—	0.519
2,2',3,3',4,4'-HxCB	128	128 + 166	1.85	C J	—	0.519
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	9.31	C B J	—	0.519
2,2',3,3',4,5'-HxCB	130	—	0.648	J	—	0.519
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.519
2,2',3,3',4,6'-HxCB	132	—	2.98	K J	U	0.519
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.519
2,2',3,3',5,6-HxCB	134	134 + 143	0.560	C K J	U	0.519
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	2.13	C K B J	U	0.519
2,2',3,3',6,6'-HxCB	136	—	0.928	K J	U	0.519
2,2',3,4,4',5-HxCB	137	—	—	U	—	0.519
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.519
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	1.37	K J	U	0.519

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-6		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.519
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.519
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.519
2,2',3,4',5,5'-HxCB	146	—	1.18	J	—	0.519
2,2',3,4',5,6-HxCB	147	147 + 149	5.36	C B J	—	0.519
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.519
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.519
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.519
2,2',4,4',5,5'-HxCB	153	153 + 168	6.61	C B J	—	0.519
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	0.674	K J	U	0.519
2,3,3',4,4',5-HxCB	156	156 + 157	0.846	C J	—	0.519
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	0.962	J	—	0.519
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.519
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.519
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.519
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	0.654	K J	U	0.519
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.519
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.552	J	—	0.519
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.519
2,2',3,3',4,4',5-HpCB	170	—	1.67	J	—	0.519
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.735	C K J	U	0.519
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.519
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.08	J	—	0.519
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.519
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.519
2,2',3,3',4',5,6-HpCB	177	—	0.782	J	—	0.519
2,2',3,3',5,5',6-HpCB	178	—	0.709	K J	U	0.519
2,2',3,3',5,6,6'-HpCB	179	—	0.637	K J	U	0.519
2,2',3,4,4',5,5'-HpCB	180	180 + 193	3.45	C K J	U	0.519
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.519
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.519
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.41	C K J	U	0.519
2,2',3,4,4',6,6'-HpCB	184	—	2.27	J	—	0.519
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.519
2,2',3,4',5,5',6-HpCB	187	—	2.92	B J	—	0.519
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.519

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55077-6		**Collection Date:** 2/24/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.519
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	0.519
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.519
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.519
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	0.918	J	—	0.519
2,2',3,3',4,4',5,6-OcCB	195	—	0.559	J	—	0.519
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	0.519
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.519
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	1.73	C K J	U	0.519
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.519
2,2',3,3',5,5',6,6'-OcCB	202	—	0.636	K J	U	0.519
2,2',3,4,4',5,5',6-OcCB	203	—	0.810	J	—	0.519
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.519
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.519
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	3.21
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.4
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	2.39
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.25	K B J	U	0.519
Total PCBs	—	—	96.4	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-6		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	2.21	B J	U	0.542
3-MoCB	2	—	2.26	K B J	U	0.542
4-MoCB	3	—	7.21	B J	U	0.542
2,2'-DiCB	4	—	—	U	—	5.27
2,3-DiCB	5	—	—	U	—	3.97
2,3'-DiCB	6	—	—	U	—	3.62
2,4-DiCB	7	—	—	U	—	3.75
2,4'-DiCB	8	—	—	U	—	3.38
2,5-DiCB	9	—	—	U	—	3.56
2,6-DiCB	10	—	—	U	—	3.26
3,3'-DiCB	11	—	10.4	B J	—	3.96
3,4-DiCB	12	12 + 13	—	C U	—	3.95
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	3.74
4,4'-DiCB	15	—	6.69	K B J	U	4.36
2,2',3-TriCB	16	—	1.57	J	—	0.766
2,2',4-TriCB	17	—	5.56	J	—	0.662
2,2',5-TriCB	18	18 + 30	2.85	C B J	—	0.546
2,2',6-TriCB	19	—	0.732	K J	U	0.542
2,3,3'-TriCB	20	20 + 28	5.56	C B J	U	0.542
2,3,4-TriCB	21	21 + 33	8.51	C B J	—	0.542
2,3,4'-TriCB	22	—	1.46	B J	—	0.542
2,3,5-TriCB	23	—	—	U	—	0.542
2,3,6-TriCB	24	—	—	U	—	0.542
2,3',4-TriCB	25	—	1.24	J	—	0.542
2,3',5-TriCB	26	26 + 29	0.712	C K J	U	0.542
2,3',6-TriCB	27	—	—	U	—	0.542
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.15	B J	U	0.542
2,4',6-TriCB	32	—	1.02	K J	U	0.542
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.542
3,3',4-TriCB	35	—	—	U	—	0.542
3,3',5-TriCB	36	—	—	U	—	0.542
3,4,4'-TriCB	37	—	1.16	J	—	0.542
3,4,5-TriCB	38	—	—	U	—	0.542
3,4',5-TriCB	39	—	—	U	—	0.542
2,2',3,3'-TeCB	40	40 + 41 + 71	2.07	C K J	U	0.898
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	0.986	J	—	0.93
2,2',3,5-TeCB	43	—	—	U	—	1.09
2,2',3,5'-TeCB	44	44 + 47 + 65	396	C B	R1	0.811
2,2',3,6-TeCB	45	45 + 51	217	C	R1	0.88
2,2',3,6'-TeCB	46	—	—	U	—	1.01
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-6		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.903
2,2',4,5'-TeCB	49	49 + 69	9.75	C B J	—	0.754
2,2',4,6-TeCB	50	50 + 53	1.18	C J	—	0.839
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.20	B J	U	0.826
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.542
2,3,3',4-TeCB	55	—	—	U	—	1.14
2,3,3',4'-TeCB	56	—	1.57	J	—	1.15
2,3,3',5-TeCB	57	—	—	U	—	1.09
2,3,3',5'-TeCB	58	—	—	U	—	1.13
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.668
2,3,4,4'-TeCB	60	—	—	U	—	1.16
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	7.55	C B J	—	1.1
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	1.05
2,3,4',6-TeCB	64	—	1.47	B J	U	0.657
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.67	B J	U	1.04
2,3',4,5-TeCB	67	—	—	U	—	0.984
2,3',4,5'-TeCB	68	—	262	—	R1	1.09
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	1.05
2,3',5',6-TeCB	73	—	—	U	—	0.671
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	1.15
3,3',4,5-TeCB	78	—	—	U	—	1.12
3,3',4,5'-TeCB	79	—	—	U	—	0.934
3,3',5,5'-TeCB	80	—	—	U	—	1.03
3,4,4',5-TeCB	81	—	—	U	—	1.16
2,2',3,3',4-PeCB	82	—	1.81	J	—	0.542
2,2',3,3',5-PeCB	83	83 + 99	8.97	C B J	—	0.542
2,2',3,3',6-PeCB	84	—	4.33	J	—	0.542
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.03	C J	—	0.542
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	10.6	C B J	—	0.542
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	4.65	C J	—	0.542
2,2',3,4,6'-PeCB	89	—	—	U	—	0.542
2,2',3,4',5-PeCB	90	90 + 101 + 113	14.9	C B J	—	0.542
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	2.47	K J	U	0.542
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	13.5	C B J	—	0.542
2,2',3,5,6'-PeCB	94	—	—	U	—	0.542

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-6		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.542
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.542
2,2',4,6,6'-PeCB	104	—	—	U	—	0.542
2,3,3',4,4'-PeCB	105	—	6.26	B J	—	0.542
2,3,3',4,5-PeCB	106	—	—	U	—	0.542
2,3,3',4',5-PeCB	107	107 + 124	0.649	C J	—	0.542
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.02	K J	U	0.542
2,3,3',4',6-PeCB	110	110 + 115	17.2	C B J	—	0.542
2,3,3',5,5'-PeCB	111	—	—	U	—	0.542
2,3,3',5,6-PeCB	112	—	—	U	—	0.542
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.542
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	13.6	B J	—	0.542
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.542
2,3',4,5',6-PeCB	121	—	—	U	—	0.542
2',3,3',4,5-PeCB	122	—	—	U	—	0.542
2',3,4,4',5-PeCB	123	—	—	U	—	0.542
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.542
3,3',4,5,5'-PeCB	127	—	—	U	—	0.542
2,2',3,3',4,4'-HxCB	128	128 + 166	5.04	C K J	U	0.542
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	22.4	C B	—	0.542
2,2',3,3',4,5'-HxCB	130	—	1.38	J	—	0.643
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.629
2,2',3,3',4,6'-HxCB	132	—	7.93	J	—	0.638
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.57
2,2',3,3',5,6-HxCB	134	134 + 143	3.76	C K J	U	0.629
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	—	C U	—	0.542
2,2',3,3',6,6'-HxCB	136	—	1.97	J	—	0.542
2,2',3,4,4',5-HxCB	137	—	1.48	K J	U	0.595
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.571
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	3.96	J	—	0.577

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-6		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.584
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	3.25	K J	U	0.542
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.542
2,2',3,4',5,5'-HxCB	146	—	2.76	J	—	0.542
2,2',3,4',5,6-HxCB	147	147 + 149	20.1	C K B J	U	0.563
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.542
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.542
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.542
2,2',4,4',5,5'-HxCB	153	153 + 168	14.5	C B J	—	0.542
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.542
2,3,3',4,4',5-HxCB	156	156 + 157	3.69	C J	—	0.542
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.61	J	—	0.542
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.542
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.542
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.542
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.25	J	—	0.542
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.542
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.00	J	—	0.542
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.542
2,2',3,3',4,4',5-HpCB	170	—	4.29	J	—	0.542
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.25	C J	—	0.542
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.542
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.80	J	—	0.542
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.542
2,2',3,3',4,6,6'-HpCB	176	—	0.583	K J	U	0.542
2,2',3,3',4',5,6-HpCB	177	—	1.87	J	—	0.542
2,2',3,3',5,5',6-HpCB	178	—	0.902	K J	U	0.542
2,2',3,3',5,6,6'-HpCB	179	—	1.36	J	—	0.542
2,2',3,4,4',5,5'-HpCB	180	180 + 193	8.02	C J	—	0.542
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.542
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.542
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.27	C J	—	0.542
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.542
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.542
2,2',3,4',5,5',6-HpCB	187	—	5.72	B J	—	0.542
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.542

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG39377		**KC Sample ID:** L55177-6		**Collection Date:** 3/5/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.542
2,3,3',4,4',5,6-HpCB	190	—	0.700	J	—	0.542
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.542
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.542
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.99	J	—	0.542
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	0.542
2,2',3,3',4,4',5,6'-OcCB	196	—	1.14	J	—	0.542
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	0.692	C J	—	0.542
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.19	C J	—	0.542
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.542
2,2',3,3',5,5',6,6'-OcCB	202	—	1.30	K J	U	0.542
2,2',3,4,4',5,5',6-OcCB	203	—	3.00	J	—	0.542
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.542
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.542
2,2',3,3',4,4',5,5',6-NoCB	206	—	5.30	J	—	2.24
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.71
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.81
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.66	K B J	U	0.542
Total PCBs	—	—	261	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		KC Sample ID: L55283-6		Collection Date: 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.88	B J	U	0.525
3-MoCB	2	—	1.87	B J	U	0.525
4-MoCB	3	—	3.32	B J	U	0.525
2,2'-DiCB	4	—	1.20	J	—	1.02
2,3-DiCB	5	—	—	U	—	0.847
2,3'-DiCB	6	—	—	U	—	0.735
2,4-DiCB	7	—	1.30	J	—	0.74
2,4'-DiCB	8	—	1.62	B J	U	0.66
2,5-DiCB	9	—	—	U	—	0.738
2,6-DiCB	10	—	—	U	—	0.715
3,3'-DiCB	11	—	15.0	B J	U	0.851
3,4-DiCB	12	12 + 13	—	C U	—	0.867
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.775
4,4'-DiCB	15	—	2.24	K B J	U	0.902
2,2',3-TriCB	16	—	1.03	K B J	U	0.525
2,2',4-TriCB	17	—	3.31	J	—	0.525
2,2',5-TriCB	18	18 + 30	2.22	C B J	—	0.525
2,2',6-TriCB	19	—	0.652	K J	U	0.525
2,3,3'-TriCB	20	20 + 28	5.12	C B J	U	0.525
2,3,4-TriCB	21	21 + 33	4.96	C B J	—	0.525
2,3,4'-TriCB	22	—	1.27	B J	U	0.525
2,3,5-TriCB	23	—	—	U	—	0.525
2,3,6-TriCB	24	—	—	U	—	0.525
2,3',4-TriCB	25	—	1.10	J	—	0.525
2,3',5-TriCB	26	26 + 29	0.643	C K J	U	0.525
2,3',6-TriCB	27	—	—	U	—	0.525
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.49	B J	U	0.525
2,4',6-TriCB	32	—	0.677	J	—	0.525
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.525
3,3',4-TriCB	35	—	—	U	—	0.525
3,3',5-TriCB	36	—	—	U	—	0.525
3,4,4'-TriCB	37	—	1.60	B J	—	0.525
3,4,5-TriCB	38	—	—	U	—	0.525
3,4',5-TriCB	39	—	—	U	—	0.525
2,2',3,3'-TeCB	40	40 + 41 + 71	2.71	C K B J	U	0.525
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.35	K J	U	0.525
2,2',3,5-TeCB	43	—	—	U	—	0.525
2,2',3,5'-TeCB	44	44 + 47 + 65	475	C B	R1	0.525
2,2',3,6-TeCB	45	45 + 51	102	C	R1	0.525
2,2',3,6'-TeCB	46	—	—	U	—	0.525
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		KC Sample ID: L55283-6		Collection Date: 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.525
2,2',4,5'-TeCB	49	49 + 69	7.60	C B J	—	0.525
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.525
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	6.04	B J	—	0.525
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.525
2,3,3',4-TeCB	55	—	—	U	—	0.698
2,3,3',4'-TeCB	56	—	2.33	K B J	U	0.693
2,3,3',5-TeCB	57	—	—	U	—	0.645
2,3,3',5'-TeCB	58	—	—	U	—	0.66
2,3,3',6-TeCB	59	59 + 62 + 75	0.858	C K J	U	0.525
2,3,4,4'-TeCB	60	—	1.31	K J	U	0.703
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	13.1	C B J	U	0.653
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.627
2,3,4',6-TeCB	64	—	2.49	B J	U	0.525
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	6.72	B J	U	0.649
2,3',4,5-TeCB	67	—	—	U	—	0.585
2,3',4,5'-TeCB	68	—	289	—	R1	0.649
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.618
2,3',5',6-TeCB	73	—	—	U	—	0.525
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	0.897	B J	—	0.59
3,3',4,5-TeCB	78	—	—	U	—	0.698
3,3',4,5'-TeCB	79	—	—	U	—	0.572
3,3',5,5'-TeCB	80	—	—	U	—	0.616
3,4,4',5-TeCB	81	—	—	U	—	0.639
2,2',3,3',4-PeCB	82	—	1.45	K J	U	0.872
2,2',3,3',5-PeCB	83	83 + 99	13.6	C B J	U	0.801
2,2',3,3',6-PeCB	84	—	4.53	K B J	U	0.939
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.88	C B J	U	0.646
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	14.6	C B J	U	0.677
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.87	C B J	U	0.799
2,2',3,4,6'-PeCB	89	—	—	U	—	0.847
2,2',3,4',5-PeCB	90	90 + 101 + 113	19.0	C B J	U	0.694
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.54	B J	U	0.827
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	13.0	C B J	U	0.773
2,2',3,5,6'-PeCB	94	—	—	U	—	0.859

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-6		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.525
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.694
2,2',4,6,6'-PeCB	104	—	—	U	—	0.525
2,3,3',4,4'-PeCB	105	—	8.48	B J	U	0.525
2,3,3',4,5-PeCB	106	—	—	U	—	0.525
2,3,3',4',5-PeCB	107	107 + 124	1.21	C K J	U	0.556
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.73	K B J	U	0.548
2,3,3',4',6-PeCB	110	110 + 115	23.3	C B	U	0.574
2,3,3',5,5'-PeCB	111	—	—	U	—	0.57
2,3,3',5,6-PeCB	112	—	—	U	—	0.581
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	0.841	J	—	0.525
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	20.0	B J	U	0.525
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.529
2,3',4,5',6-PeCB	121	—	—	U	—	0.598
2',3,3',4,5-PeCB	122	—	—	U	—	0.568
2',3,4,4',5-PeCB	123	—	—	U	—	0.525
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.577
3,3',4,5,5'-PeCB	127	—	—	U	—	0.525
2,2',3,3',4,4'-HxCB	128	128 + 166	4.80	C B J	—	0.525
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	19.3	C B J	U	0.525
2,2',3,3',4,5'-HxCB	130	—	1.38	J	—	0.555
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.667
2,2',3,3',4,6'-HxCB	132	—	6.65	B J	U	0.667
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.583
2,2',3,3',5,6-HxCB	134	134 + 143	0.775	C K J	U	0.661
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	4.69	C B J	U	0.709
2,2',3,3',6,6'-HxCB	136	—	1.95	B J	—	0.565
2,2',3,4,4',5-HxCB	137	—	1.68	K J	U	0.525
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	1.03	C J	—	0.59
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.45	J	—	0.525

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-6		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.641
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	0.815	K J	U	0.718
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.607
2,2',3,4',5,5'-HxCB	146	—	2.77	K J	U	0.525
2,2',3,4',5,6-HxCB	147	147 + 149	13.7	C B J	—	0.599
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.767
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.589
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.548
2,2',4,4',5,5'-HxCB	153	153 + 168	13.0	C B J	U	0.525
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.525
2,3,3',4,4',5-HxCB	156	156 + 157	3.19	C J	—	0.57
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.00	J	—	0.525
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.525
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.525
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.525
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.00	K J	U	0.525
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.525
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.07	K J	U	0.525
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.525
2,2',3,3',4,4',5-HpCB	170	—	3.23	B J	—	0.59
2,2',3,3',4,4',6-HpCB	171	171 + 173	0.918	C K J	U	0.57
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.581
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	2.66	K B J	U	0.525
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.525
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.525
2,2',3,3',4',5,6-HpCB	177	—	1.31	K J	U	0.55
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	0.525
2,2',3,3',5,6,6'-HpCB	179	—	1.29	J	—	0.525
2,2',3,4,4',5,5'-HpCB	180	180 + 193	5.72	C B J	—	0.525
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.538
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.525
2,2',3,4,4',5',6-HpCB	183	183 + 185	1.88	C K J	U	0.525
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.525
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.525
2,2',3,4',5,5',6-HpCB	187	—	3.41	K B J	U	0.525
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.525

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55283-6		**Collection Date:** 3/10/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.525
2,3,3',4,4',5,6-HpCB	190	—	0.609	K J	U	0.525
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.525
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.525
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	1.63	J	—	0.525
2,2',3,3',4,4',5,6-OcCB	195	—	0.664	K J	U	0.525
2,2',3,3',4,4',5,6'-OcCB	196	—	0.728	K J	U	0.525
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.525
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	2.54	C B J	—	0.528
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.525
2,2',3,3',5,5',6,6'-OcCB	202	—	0.761	K J	U	0.525
2,2',3,4,4',5,5',6-OcCB	203	—	1.68	J	—	0.525
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.525
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.525
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.91	K J	U	1.15
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.9
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.00	K J	U	0.962
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.59	K B J	U	0.525
Total PCBs	—	—	78.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-6		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	0.645	B J	U	0.512
3-MoCB	2	—	0.730	B J	U	0.512
4-MoCB	3	—	2.03	B J	U	0.512
2,2'-DiCB	4	—	1.31	J	—	0.996
2,3-DiCB	5	—	—	U	—	0.908
2,3'-DiCB	6	—	—	U	—	0.789
2,4-DiCB	7	—	0.921	K J	U	0.794
2,4'-DiCB	8	—	2.35	B J	U	0.708
2,5-DiCB	9	—	—	U	—	0.792
2,6-DiCB	10	—	—	U	—	0.767
3,3'-DiCB	11	—	15.2	B J	U	0.913
3,4-DiCB	12	12 + 13	—	C U	—	0.929
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	0.831
4,4'-DiCB	15	—	2.70	K B J	U	1.03
2,2',3-TriCB	16	—	1.23	K B J	U	0.512
2,2',4-TriCB	17	—	3.43	K J	U	0.512
2,2',5-TriCB	18	18 + 30	3.17	C B J	—	0.512
2,2',6-TriCB	19	—	0.637	K J	U	0.512
2,3,3'-TriCB	20	20 + 28	6.01	C B J	U	0.512
2,3,4-TriCB	21	21 + 33	3.95	C B J	—	0.512
2,3,4'-TriCB	22	—	1.76	K B J	U	0.512
2,3,5-TriCB	23	—	—	U	—	0.512
2,3,6-TriCB	24	—	—	U	—	0.512
2,3',4-TriCB	25	—	0.879	J	—	0.512
2,3',5-TriCB	26	26 + 29	0.652	C J	—	0.512
2,3',6-TriCB	27	—	—	U	—	0.512
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.47	B J	U	0.512
2,4',6-TriCB	32	—	0.871	K J	U	0.512
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.512
3,3',4-TriCB	35	—	—	U	—	0.512
3,3',5-TriCB	36	—	—	U	—	0.512
3,4,4'-TriCB	37	—	1.60	B J	—	0.512
3,4,5-TriCB	38	—	—	U	—	0.512
3,4',5-TriCB	39	—	—	U	—	0.512
2,2',3,3'-TeCB	40	40 + 41 + 71	2.62	C B J	U	0.512
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.17	K J	U	0.512
2,2',3,5-TeCB	43	—	—	U	—	0.512
2,2',3,5'-TeCB	44	44 + 47 + 65	201	C B	R1	0.512
2,2',3,6-TeCB	45	45 + 51	45.8	C	R1	0.512
2,2',3,6'-TeCB	46	—	—	U	—	0.512
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-6		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	0.901	K J	U	0.512
2,2',4,5'-TeCB	49	49 + 69	4.63	C B J	—	0.512
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.512
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	8.07	B J	—	0.512
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.512
2,3,3',4-TeCB	55	—	—	U	—	0.64
2,3,3',4'-TeCB	56	—	2.00	B J	U	0.635
2,3,3',5-TeCB	57	—	—	U	—	0.591
2,3,3',5'-TeCB	58	—	—	U	—	0.606
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.512
2,3,4,4'-TeCB	60	—	1.51	K J	U	0.645
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	13.7	C B J	U	0.599
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.576
2,3,4',6-TeCB	64	—	2.79	B J	U	0.512
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.50	B J	U	0.595
2,3',4,5-TeCB	67	—	—	U	—	0.536
2,3',4,5'-TeCB	68	—	265	—	R1	0.595
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.567
2,3',5',6-TeCB	73	—	—	U	—	0.512
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.04	B J	—	0.533
3,3',4,5-TeCB	78	—	—	U	—	0.64
3,3',4,5'-TeCB	79	—	—	U	—	0.525
3,3',5,5'-TeCB	80	—	—	U	—	0.565
3,4,4',5-TeCB	81	—	—	U	—	0.624
2,2',3,3',4-PeCB	82	—	2.05	J	—	0.804
2,2',3,3',5-PeCB	83	83 + 99	12.5	C B J	U	0.738
2,2',3,3',6-PeCB	84	—	4.48	B J	U	0.866
2,2',3,4,4'-PeCB	85	85 + 116 + 117	4.00	C K B J	U	0.596
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	12.7	C B J	U	0.624
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.85	C B J	U	0.737
2,2',3,4,6'-PeCB	89	—	—	U	—	0.781
2,2',3,4',5-PeCB	90	90 + 101 + 113	19.4	C B J	U	0.64
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.49	B J	U	0.763
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	14.6	C B J	U	0.713
2,2',3,5,6'-PeCB	94	—	—	U	—	0.793

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-6		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.512
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.64
2,2',4,6,6'-PeCB	104	—	—	U	—	0.512
2,3,3',4,4'-PeCB	105	—	6.28	B J	U	0.512
2,3,3',4,5-PeCB	106	—	—	U	—	0.512
2,3,3',4',5-PeCB	107	107 + 124	0.958	C J	—	0.512
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.48	K B J	U	0.512
2,3,3',4',6-PeCB	110	110 + 115	20.3	C B J	U	0.53
2,3,3',5,5'-PeCB	111	—	—	U	—	0.526
2,3,3',5,6-PeCB	112	—	—	U	—	0.536
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.512
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	17.4	B J	U	0.512
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.512
2,3',4,5',6-PeCB	121	—	—	U	—	0.551
2',3,3',4,5-PeCB	122	—	—	U	—	0.512
2',3,4,4',5-PeCB	123	—	—	U	—	0.512
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.512
3,3',4,5,5'-PeCB	127	—	—	U	—	0.512
2,2',3,3',4,4'-HxCB	128	128 + 166	3.72	C B J	—	0.591
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	16.2	C B J	U	0.567
2,2',3,3',4,5'-HxCB	130	—	0.887	K J	U	0.7
2,2',3,3',4,6-HxCB	131	—	—	U	—	0.841
2,2',3,3',4,6'-HxCB	132	—	5.82	B J	U	0.842
2,2',3,3',5,5'-HxCB	133	—	—	U	—	0.735
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	0.833
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	5.15	C K B J	U	0.677
2,2',3,3',6,6'-HxCB	136	—	1.99	B J	—	0.54
2,2',3,4,4',5-HxCB	137	—	1.00	J	—	0.659
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	0.744
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	2.41	J	—	0.634

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-6		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	0.808
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.686
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.58
2,2',3,4',5,5'-HxCB	146	—	2.31	J	—	0.631
2,2',3,4',5,6-HxCB	147	147 + 149	12.9	C B J	—	0.755
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.733
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.563
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.523
2,2',4,4',5,5'-HxCB	153	153 + 168	12.4	C B J	U	0.512
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.512
2,3,3',4,4',5-HxCB	156	156 + 157	2.43	C J	—	0.73
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	1.61	J	—	0.512
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.515
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.512
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.548
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.08	K J	U	0.512
2,3,3',5,5',6-HxCB	165	—	—	U	—	0.585
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	0.781	K J	U	0.512
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.539
2,2',3,3',4,4',5-HpCB	170	—	3.25	B J	—	0.573
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.45	C K J	U	0.541
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	0.551
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	3.18	K B J	U	0.512
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	0.512
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.512
2,2',3,3',4',5,6-HpCB	177	—	2.11	K J	U	0.522
2,2',3,3',5,5',6-HpCB	178	—	0.537	K J	U	0.512
2,2',3,3',5,6,6'-HpCB	179	—	1.37	J	—	0.512
2,2',3,4,4',5,5'-HpCB	180	180 + 193	6.87	C B J	—	0.512
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	0.512
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	0.512
2,2',3,4,4',5',6-HpCB	183	183 + 185	2.75	C K J	U	0.512
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.512
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.512
2,2',3,4',5,5',6-HpCB	187	—	4.42	B J	U	0.512
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.512

Table B2-12. PCB Congener AXYS Analytical Data for Green River - Foster Links (FL319) - Storm Events

AXYS Workgroup: WG40069		**KC Sample ID:** L55284-6		**Collection Date:** 3/20/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.512
2,3,3',4,4',5,6-HpCB	190	—	0.775	K J	U	0.512
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.512
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	0.512
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	2.14	K J	U	0.512
2,2',3,3',4,4',5,6-OcCB	195	—	0.925	K J	U	0.514
2,2',3,3',4,4',5,6'-OcCB	196	—	0.781	K J	U	0.527
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U	—	0.512
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	3.25	C B J	—	0.542
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	0.512
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	0.512
2,2',3,4,4',5,5',6-OcCB	203	—	1.55	K J	U	0.512
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.512
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.512
2,2',3,3',4,4',5,5',6-NoCB	206	—	1.57	J	—	0.8
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	0.612
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	0.64
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.40	B J	—	0.512
Total PCBs	—	—	74.4	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

R1 = This qualifier was added post-validation to identify coeluting groups that are heavily influenced by contamination from silicone tubing used with autosamplers. These congeners were not included in total PCB calculations.

Table B2-13. PCB Congener AXYS Analytical Data for Field Blank

AXYS Workgroup: WG42168		**KC Sample ID:** L56881-1		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	4.20	B J	U	0.228
3-MoCB	2	—	3.55	B J	U	0.264
4-MoCB	3	—	5.75	K B	U	0.267
2,2'-DiCB	4	—	—	U	—	2.68
2,3-DiCB	5	—	—	U	—	2.3
2,3'-DiCB	6	—	—	U	—	2.07
2,4-DiCB	7	—	2.52	J	—	2.09
2,4'-DiCB	8	—	2.52	J	—	1.94
2,5-DiCB	9	—	—	U	—	2.06
2,6-DiCB	10	—	—	U	—	2.03
3,3'-DiCB	11	—	14.2	B	—	2.39
3,4-DiCB	12	12 + 13	—	C U	—	2.24
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	2.12
4,4'-DiCB	15	—	—	U	—	2.55
2,2',3-TriCB	16	—	1.33	J	—	0.897
2,2',4-TriCB	17	—	2.82	J	—	0.786
2,2',5-TriCB	18	18 + 30	2.80	C B J	U	0.64
2,2',6-TriCB	19	—	—	U	—	0.745
2,3,3'-TriCB	20	20 + 28	4.16	C B J	U	0.493
2,3,4-TriCB	21	21 + 33	5.27	C B	—	0.471
2,3,4'-TriCB	22	—	1.63	B J	U	0.517
2,3,5-TriCB	23	—	—	U	—	0.501
2,3,6-TriCB	24	—	—	U	—	0.574
2,3',4-TriCB	25	—	0.691	K J	U	0.411
2,3',5-TriCB	26	26 + 29	0.717	C K B J	U	0.492
2,3',6-TriCB	27	—	—	U	—	0.509
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.78	B J	U	0.467
2,4',6-TriCB	32	—	1.06	B J	—	0.467
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.504
3,3',4-TriCB	35	—	—	U	—	0.583
3,3',5-TriCB	36	—	—	U	—	0.504
3,4,4'-TriCB	37	—	1.10	B J	U	0.566
3,4,5-TriCB	38	—	—	U	—	0.508
3,4',5-TriCB	39	—	—	U	—	0.5
2,2',3,3'-TeCB	40	40 + 41 + 71	2.03	C K B J	U	0.78
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	0.756
2,2',3,5-TeCB	43	—	—	U	—	0.856
2,2',3,5'-TeCB	44	44 + 47 + 65	24.4	C B	—	0.698
2,2',3,6-TeCB	45	45 + 51	66.9	C	—	0.76
2,2',3,6'-TeCB	46	—	—	U	—	0.883
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-13. PCB Congener AXYS Analytical Data for Field Blank

AXYS Workgroup: WG42168		KC Sample ID: L56881-1		Collection Date: 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.768
2,2',4,5'-TeCB	49	49 + 69	2.71	C B J	U	0.645
2,2',4,6-TeCB	50	50 + 53	0.854	C K J	U	0.717
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	3.34	B J	U	0.723
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.512
2,3,3',4-TeCB	55	—	—	U	—	0.787
2,3,3',4'-TeCB	56	—	1.12	B J	U	0.818
2,3,3',5-TeCB	57	—	—	U	—	0.781
2,3,3',5'-TeCB	58	—	—	U	—	0.758
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.567
2,3,4,4'-TeCB	60	—	—	U	—	0.836
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	4.00	C B J	—	0.768
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.718
2,3,4',6-TeCB	64	—	1.13	B J	—	0.542
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	1.90	B J	—	0.767
2,3',4,5-TeCB	67	—	—	U	—	0.652
2,3',4,5'-TeCB	68	—	16.4	—	—	0.741
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.691
2,3',5',6-TeCB	73	—	—	U	—	0.587
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.837
3,3',4,5-TeCB	78	—	—	U	—	0.807
3,3',4,5'-TeCB	79	—	—	U	—	0.688
3,3',5,5'-TeCB	80	—	—	U	—	0.738
3,4,4',5-TeCB	81	—	—	U	—	0.793
2,2',3,3',4-PeCB	82	—	—	U	—	1.39
2,2',3,3',5-PeCB	83	83 + 99	2.22	C K B J	U	1.28
2,2',3,3',6-PeCB	84	—	—	U	—	1.41
2,2',3,4,4'-PeCB	85	85 + 116 + 117	1.15	C J	—	1.07
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	3.21	C B J	U	1.08
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	—	C U	—	1.21
2,2',3,4,6'-PeCB	89	—	—	U	—	1.33
2,2',3,4',5-PeCB	90	90 + 101 + 113	3.62	C B J	—	1.11
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	—	U	—	1.28
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	3.92	C K B J	U	1.14
2,2',3,5,6'-PeCB	94	—	—	U	—	1.31

Table B2-13. PCB Congener AXYS Analytical Data for Field Blank

AXYS Workgroup: WG42168		**KC Sample ID:** L56881-1		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.739
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.08
2,2',4,6,6'-PeCB	104	—	—	U	—	0.691
2,3,3',4,4'-PeCB	105	—	1.40	K B J	U	0.802
2,3,3',4,5-PeCB	106	—	—	U	—	0.771
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.814
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.78
2,3,3',4',6-PeCB	110	110 + 115	4.92	C B	U	0.961
2,3,3',5,5'-PeCB	111	—	—	U	—	0.935
2,3,3',5,6-PeCB	112	—	—	U	—	0.859
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.744
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	3.16	B J	—	0.735
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.883
2,3',4,5',6-PeCB	121	—	—	U	—	0.945
2',3,3',4,5-PeCB	122	—	—	U	—	0.86
2',3,4,4',5-PeCB	123	—	—	U	—	0.785
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.843
3,3',4,5,5'-PeCB	127	—	—	U	—	0.823
2,2',3,3',4,4'-HxCB	128	128 + 166	—	C U	—	1.25
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	3.39	C B J	U	1.24
2,2',3,3',4,5'-HxCB	130	—	—	U	—	1.58
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.46
2,2',3,3',4,6'-HxCB	132	—	1.67	K J	U	1.41
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.42
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.41
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	1.67	C B J	U	1.26
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.905
2,2',3,4,4',5-HxCB	137	—	—	U	—	1.56
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.31
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	1.34

Table B2-13. PCB Congener AXYS Analytical Data for Field Blank

AXYS Workgroup: WG42168		KC Sample ID: L56881-1		Collection Date: 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.45
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.29
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1
2,2',3,4',5,5'-HxCB	146	—	—	U	—	1.23
2,2',3,4',5,6-HxCB	147	147 + 149	2.43	C J	—	1.26
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.27
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.949
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.883
2,2',4,4',5,5'-HxCB	153	153 + 168	2.27	C B J	U	1.07
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.704
2,3,3',4,4',5-HxCB	156	156 + 157	—	C U	—	1.21
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.956
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.02
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.973
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.05
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	1
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.15
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.913
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.982
2,2',3,3',4,4',5-HpCB	170	—	—	U	—	1.46
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	1.3
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.39
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	1.26
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.22
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.853
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	1.31
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	1.26
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.848
2,2',3,4,4',5,5'-HpCB	180	180 + 193	—	C U	—	1.15
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.23
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.16
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	1.24
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.827
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.925
2,2',3,4',5,5',6-HpCB	187	—	—	U	—	1.17
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.808

Table B2-13. PCB Congener AXYS Analytical Data for Field Blank

AXYS Workgroup: WG42168		**KC Sample ID:** L56881-1		**Collection Date:** 10/31/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.962
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	1.06
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	1.01
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.1
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	1.34
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	1.39
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	1.65
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.12
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	1.74
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.1
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	1.21
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	1.44
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.11
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.943
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.76
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.39
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.37
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	—	U	—	1.57
Total PCBs	—	—	155	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-14. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler- Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-4		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	1.89	B J	U	0.289
3-MoCB	2	—	1.31	B J	U	0.358
4-MoCB	3	—	2.51	K B J	U	0.381
2,2'-DiCB	4	—	—	U	—	2.27
2,3-DiCB	5	—	—	U	—	1.88
2,3'-DiCB	6	—	—	U	—	1.7
2,4-DiCB	7	—	—	U	—	1.73
2,4'-DiCB	8	—	1.78	K J	U	1.58
2,5-DiCB	9	—	1.76	K B J	U	1.67
2,6-DiCB	10	—	—	U	—	1.71
3,3'-DiCB	11	—	13.9	B	—	1.93
3,4-DiCB	12	12 + 13	—	C U	—	1.88
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.77
4,4'-DiCB	15	—	—	U	—	2.04
2,2',3-TriCB	16	—	1.73	K J	U	1.1
2,2',4-TriCB	17	—	4.54	—	—	0.925
2,2',5-TriCB	18	18 + 30	4.26	C B	U	0.766
2,2',6-TriCB	19	—	—	U	—	0.903
2,3,3'-TriCB	20	20 + 28	5.33	C B	U	0.606
2,3,4-TriCB	21	21 + 33	4.34	C B	—	0.567
2,3,4'-TriCB	22	—	1.42	B J	U	0.658
2,3,5-TriCB	23	—	—	U	—	0.621
2,3,6-TriCB	24	—	—	U	—	0.687
2,3',4-TriCB	25	—	3.40	J	—	0.502
2,3',5-TriCB	26	26 + 29	2.58	C B J	—	0.6
2,3',6-TriCB	27	—	0.861	K J	U	0.623
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	3.43	B J	U	0.565
2,4',6-TriCB	32	—	1.67	B J	—	0.553
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.625
3,3',4-TriCB	35	—	—	U	—	0.689
3,3',5-TriCB	36	—	—	U	—	0.611
3,4,4'-TriCB	37	—	0.736	B J	U	0.661
3,4,5-TriCB	38	—	—	U	—	0.603
3,4',5-TriCB	39	—	—	U	—	0.603
2,2',3,3'-TeCB	40	40 + 41 + 71	7.46	C B	—	0.978
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.82	J	—	1.01
2,2',3,5-TeCB	43	—	—	U	—	1.17
2,2',3,5'-TeCB	44	44 + 47 + 65	307	C B	—	0.88
2,2',3,6-TeCB	45	45 + 51	53.8	C	—	0.949
2,2',3,6'-TeCB	46	—	2.81	J	—	1.12
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-14. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler- Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-4		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.98
2,2',4,5'-TeCB	49	49 + 69	37.4	C B	—	0.813
2,2',4,6-TeCB	50	50 + 53	21.7	C	—	0.913
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	33.0	B	—	0.908
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.595
2,3,3',4-TeCB	55	—	—	U	—	0.948
2,3,3',4'-TeCB	56	—	1.11	B J	U	0.945
2,3,3',5-TeCB	57	—	—	U	—	0.867
2,3,3',5'-TeCB	58	—	—	U	—	0.886
2,3,3',6-TeCB	59	59 + 62 + 75	5.09	C	—	0.711
2,3,4,4'-TeCB	60	—	—	U	—	0.938
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	6.63	C B	—	0.864
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.839
2,3,4',6-TeCB	64	—	3.40	B J	—	0.686
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	3.76	B J	—	0.867
2,3',4,5-TeCB	67	—	—	U	—	0.764
2,3',4,5'-TeCB	68	—	108	—	—	0.824
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	2.06	J	—	0.816
2,3',5',6-TeCB	73	—	1.56	J	—	0.71
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.913
3,3',4,5-TeCB	78	—	—	U	—	0.928
3,3',4,5'-TeCB	79	—	—	U	—	0.737
3,3',5,5'-TeCB	80	—	—	U	—	0.815
3,4,4',5-TeCB	81	—	—	U	—	0.9
2,2',3,3',4-PeCB	82	—	—	U	—	1.62
2,2',3,3',5-PeCB	83	83 + 99	11.6	C B	—	1.42
2,2',3,3',6-PeCB	84	—	4.83	—	—	1.62
2,2',3,4,4'-PeCB	85	85 + 116 + 117	2.58	C J	—	1.19
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	9.09	C B	U	1.22
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	5.63	C	—	1.4
2,2',3,4,6'-PeCB	89	—	—	U	—	1.47
2,2',3,4',5-PeCB	90	90 + 101 + 113	14.7	C B	—	1.18
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	6.79	B	—	1.35
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	26.4	C B	—	1.34
2,2',3,5,6'-PeCB	94	—	—	U	—	1.5

Table B2-14. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler- Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-4		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.865
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.2
2,2',4,6,6'-PeCB	104	—	—	U	—	0.804
2,3,3',4,4'-PeCB	105	—	2.89	B J	U	0.873
2,3,3',4,5-PeCB	106	—	—	U	—	0.854
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.904
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.17	J	—	0.896
2,3,3',4',6-PeCB	110	110 + 115	22.8	C B	—	1.05
2,3,3',5,5'-PeCB	111	—	—	U	—	1.07
2,3,3',5,6-PeCB	112	—	—	U	—	1.05
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.848
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	9.76	B	—	0.83
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	1
2,3',4,5',6-PeCB	121	—	—	U	—	1.03
2',3,3',4,5-PeCB	122	—	—	U	—	0.964
2',3,4,4',5-PeCB	123	—	—	U	—	0.869
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.92
3,3',4,5,5'-PeCB	127	—	—	U	—	0.905
2,2',3,3',4,4'-HxCB	128	128 + 166	1.73	C J	—	1.54
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	15.1	C B	U	1.53
2,2',3,3',4,5'-HxCB	130	—	—	U	—	1.98
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.85
2,2',3,3',4,6'-HxCB	132	—	3.51	J	—	1.89
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.82
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.83
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	6.70	C K B	U	1.46
2,2',3,3',6,6'-HxCB	136	—	1.63	J	—	1.06
2,2',3,4,4',5-HxCB	137	—	—	U	—	1.73
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.63
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	1.69

Table B2-14. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler- Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-4		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.8
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.47
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1.13
2,2',3,4',5,5'-HxCB	146	—	3.29	K J	U	1.58
2,2',3,4',5,6-HxCB	147	147 + 149	10.8	C	—	1.62
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.5
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	1.05
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.985
2,2',4,4',5,5'-HxCB	153	153 + 168	11.1	C B	U	1.37
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.829
2,3,3',4,4',5-HxCB	156	156 + 157	1.51	C K J	U	1.49
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	1.16
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.26
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	1.26
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.26
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	1.33
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.43
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	1.11
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.2
2,2',3,3',4,4',5-HpCB	170	—	—	U	—	1.49
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	1.46
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.49
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	1.32
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.26
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.947
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	1.37
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	1.32
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.926
2,2',3,4,4',5,5'-HpCB	180	180 + 193	2.86	C K B J	U	1.16
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.36
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.29
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	1.3
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.932
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	1
2,2',3,4',5,5',6-HpCB	187	—	1.97	J	—	1.24
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.876

Table B2-14. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler- Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-4		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.876
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	1.06
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	1.04
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.14
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	1.47
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	1.57
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	1.7
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.16
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	1.68
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.17
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	1.2
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	1.56
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.16
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	1.1
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	1.97
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.49
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.49
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	1.51	B J	—	1.48
Total PCBs	—	—	754	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-15. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-4	**Collection Date:** 12/3/2012		**Sample Info:** 17 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	4.57	B	U	0.246
3-MoCB	2	—	3.11	B J	U	0.302
4-MoCB	3	—	4.93	B	—	0.32
2,2'-DiCB	4	—	—	U	—	2.12
2,3-DiCB	5	—	—	U	—	1.77
2,3'-DiCB	6	—	—	U	—	1.59
2,4-DiCB	7	—	—	U	—	1.63
2,4'-DiCB	8	—	3.20	K J	U	1.48
2,5-DiCB	9	—	2.03	K B J	U	1.57
2,6-DiCB	10	—	—	U	—	1.61
3,3'-DiCB	11	—	17.8	B	—	1.82
3,4-DiCB	12	12 + 13	—	C U	—	1.77
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.67
4,4'-DiCB	15	—	2.69	K J	U	1.92
2,2',3-TriCB	16	—	2.19	J	—	1.09
2,2',4-TriCB	17	—	4.82	—	—	0.916
2,2',5-TriCB	18	18 + 30	4.20	C B	U	0.758
2,2',6-TriCB	19	—	0.858	K J	U	0.846
2,3,3'-TriCB	20	20 + 28	7.29	C B	U	0.606
2,3,4-TriCB	21	21 + 33	5.72	C B	—	0.566
2,3,4'-TriCB	22	—	2.06	B J	U	0.658
2,3,5-TriCB	23	—	—	U	—	0.62
2,3,6-TriCB	24	—	—	U	—	0.68
2,3',4-TriCB	25	—	1.27	J	—	0.501
2,3',5-TriCB	26	26 + 29	1.31	C B J	U	0.6
2,3',6-TriCB	27	—	—	U	—	0.617
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	4.72	B	U	0.564
2,4',6-TriCB	32	—	1.73	B J	—	0.553
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.625
3,3',4-TriCB	35	—	—	U	—	0.689
3,3',5-TriCB	36	—	—	U	—	0.611
3,4,4'-TriCB	37	—	1.58	B J	U	0.683
3,4,5-TriCB	38	—	—	U	—	0.603
3,4',5-TriCB	39	—	—	U	—	0.602
2,2',3,3'-TeCB	40	40 + 41 + 71	3.65	C B J	—	1.03
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	1.68	K J	U	1.07
2,2',3,5-TeCB	43	—	—	U	—	1.24
2,2',3,5'-TeCB	44	44 + 47 + 65	108	C B	—	0.93
2,2',3,6-TeCB	45	45 + 51	63.9	C	—	1
2,2',3,6'-TeCB	46	—	—	U	—	1.19
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-15. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-4	**Collection Date:** 12/3/2012		**Sample Info:** 17 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	1.32	K J	U	1.04
2,2',4,5'-TeCB	49	49 + 69	8.04	C B	—	0.859
2,2',4,6-TeCB	50	50 + 53	2.79	C J	—	0.965
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	11.6	B	—	0.959
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.576
2,3,3',4-TeCB	55	—	—	U	—	1.09
2,3,3',4'-TeCB	56	—	2.61	B J	U	1.09
2,3,3',5-TeCB	57	—	—	U	—	0.995
2,3,3',5'-TeCB	58	—	—	U	—	1.02
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.751
2,3,4,4'-TeCB	60	—	1.33	K B J	U	1.08
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	10.5	C B	—	0.992
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.962
2,3,4',6-TeCB	64	—	2.75	B J	—	0.725
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.26	B	—	0.995
2,3',4,5-TeCB	67	—	—	U	—	0.877
2,3',4,5'-TeCB	68	—	47.4	—	—	0.946
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.937
2,3',5',6-TeCB	73	—	—	U	—	0.75
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.15	K B J	U	1.09
3,3',4,5-TeCB	78	—	—	U	—	1.07
3,3',4,5'-TeCB	79	—	—	U	—	0.846
3,3',5,5'-TeCB	80	—	—	U	—	0.935
3,4,4',5-TeCB	81	—	—	U	—	1.08
2,2',3,3',4-PeCB	82	—	2.08	K J	U	1.79
2,2',3,3',5-PeCB	83	83 + 99	9.97	C B	—	1.56
2,2',3,3',6-PeCB	84	—	4.80	—	—	1.79
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.68	C J	—	1.31
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	12.6	C B	U	1.34
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.96	C K J	U	1.55
2,2',3,4,6'-PeCB	89	—	—	U	—	1.62
2,2',3,4',5-PeCB	90	90 + 101 + 113	18.2	C B	—	1.31
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.44	K B J	U	1.49
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	15.5	C B	—	1.48
2,2',3,5,6'-PeCB	94	—	—	U	—	1.66

Table B2-15. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler - Storm Event

AXYS Workgroup: WG42168		KC Sample ID: L56869-4	Collection Date: 12/3/2012		Sample Info: 17 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	1.04
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.32
2,2',4,6,6'-PeCB	104	—	—	U	—	0.891
2,3,3',4,4'-PeCB	105	—	7.72	B	—	1.12
2,3,3',4,5-PeCB	106	—	—	U	—	1.06
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	1.12
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.18	K J	U	1.11
2,3,3',4',6-PeCB	110	110 + 115	21.6	C B	—	1.16
2,3,3',5,5'-PeCB	111	—	—	U	—	1.18
2,3,3',5,6-PeCB	112	—	—	U	—	1.15
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	1.03
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	15.4	B	—	1.05
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	1.11
2,3',4,5',6-PeCB	121	—	—	U	—	1.14
2',3,3',4,5-PeCB	122	—	—	U	—	1.2
2',3,4,4',5-PeCB	123	—	—	U	—	1.11
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	1.18
3,3',4,5,5'-PeCB	127	—	—	U	—	1.12
2,2',3,3',4,4'-HxCB	128	128 + 166	4.15	C	—	1.56
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	28.0	C B	—	1.55
2,2',3,3',4,5'-HxCB	130	—	2.03	K J	U	2.01
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.88
2,2',3,3',4,6'-HxCB	132	—	9.35	—	—	1.91
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.84
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.85
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	7.64	C K B	U	1.48
2,2',3,3',6,6'-HxCB	136	—	3.08	J	—	1.07
2,2',3,4,4',5-HxCB	137	—	—	U	—	1.75
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.65
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	4.30	—	—	1.71

Table B2-15. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-4	**Collection Date:** 12/3/2012		**Sample Info:** 17 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.83
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.5
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1.15
2,2',3,4',5,5'-HxCB	146	—	4.73	—	—	1.6
2,2',3,4',5,6-HxCB	147	147 + 149	17.8	C	—	1.64
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.52
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	1.07
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	1
2,2',4,4',5,5'-HxCB	153	153 + 168	21.0	C B	—	1.39
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.76
2,3,3',4,4',5-HxCB	156	156 + 157	3.57	C K J	U	1.55
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.95	K J	U	1.17
2,3,3',4,5,5'-HxCB	159	—	—	U	—	1.28
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	1.27
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.28
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	1.83	J	—	1.34
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.44
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	1.16
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	1.25
2,2',3,3',4,4',5-HpCB	170	—	5.61	—	—	1.97
2,2',3,3',4,4',6-HpCB	171	171 + 173	1.91	C J	—	1.85
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.88
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	5.81	—	—	1.68
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.6
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	1.2
2,2',3,3',4',5,6-HpCB	177	—	3.34	J	—	1.73
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	1.67
2,2',3,3',5,6,6'-HpCB	179	—	2.20	J	—	1.17
2,2',3,4,4',5,5'-HpCB	180	180 + 193	13.1	C B	—	1.45
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.73
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.64
2,2',3,4,4',5',6-HpCB	183	183 + 185	3.95	C J	—	1.65
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	1.18
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	1.27
2,2',3,4',5,5',6-HpCB	187	—	7.22	—	—	1.57
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	1.09

Table B2-15. PCB Congener AXYS Analytical Data for Method Evaluation: Autosampler - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-4	**Collection Date:** 12/3/2012		**Sample Info:** 17 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	1.12
2,3,3',4,4',5,6-HpCB	190	—	1.40	K J	U	1.34
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	1.32
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.45
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	3.75	K J	U	1.82
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	1.95
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	2.35
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.61
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	4.89	C K	U	2.32
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.62
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	1.63
2,2',3,4,4',5,5',6-OcCB	203	—	2.56	J	—	2.15
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.6
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	1.38
2,2',3,3',4,4',5,5',6-NoCB	206	—	2.69	J	—	2.6
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	2.12
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U G	—	2.26
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.50	K B J	U	1.73
Total PCBs	—	—	542	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-16. PCB Congener AXYS Analytical Data for Method Evalution: Cross-sectional Composite - Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-1		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	4.80	B	U	0.255
3-MoCB	2	—	3.67	B J	U	0.299
4-MoCB	3	—	5.88	B	—	0.302
2,2'-DiCB	4	—	1.94	K J	U	1.82
2,3-DiCB	5	—	—	U	—	1.56
2,3'-DiCB	6	—	—	U	—	1.4
2,4-DiCB	7	—	—	U	—	1.44
2,4'-DiCB	8	—	2.46	K J	U	1.31
2,5-DiCB	9	—	1.88	K B J	U	1.38
2,6-DiCB	10	—	—	U	—	1.42
3,3'-DiCB	11	—	8.54	B	—	1.6
3,4-DiCB	12	12 + 13	—	C U	—	1.56
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.47
4,4'-DiCB	15	—	1.96	K J	U	1.72
2,2',3-TriCB	16	—	1.19	J	—	0.929
2,2',4-TriCB	17	—	1.36	J	—	0.782
2,2',5-TriCB	18	18 + 30	2.56	C B J	U	0.647
2,2',6-TriCB	19	—	—	U	—	0.735
2,3,3'-TriCB	20	20 + 28	3.51	C B J	U	0.543
2,3,4-TriCB	21	21 + 33	1.68	C B J	—	0.508
2,3,4'-TriCB	22	—	1.19	K B J	U	0.59
2,3,5-TriCB	23	—	—	U	—	0.556
2,3,6-TriCB	24	—	—	U	—	0.581
2,3',4-TriCB	25	—	—	U	—	0.449
2,3',5-TriCB	26	26 + 29	0.706	C K B J	U	0.538
2,3',6-TriCB	27	—	—	U	—	0.527
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	2.24	B J	U	0.506
2,4',6-TriCB	32	—	0.531	B J	—	0.496
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.56
3,3',4-TriCB	35	—	—	U	—	0.618
3,3',5-TriCB	36	—	—	U	—	0.548
3,4,4'-TriCB	37	—	0.784	B J	U	0.606
3,4,5-TriCB	38	—	—	U	—	0.541
3,4',5-TriCB	39	—	—	U	—	0.54
2,2',3,3'-TeCB	40	40 + 41 + 71	1.27	C B J	—	1.02
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	—	U	—	1.05
2,2',3,5-TeCB	43	—	—	U	—	1.22
2,2',3,5'-TeCB	44	44 + 47 + 65	12.2	C B	U	0.914
2,2',3,6-TeCB	45	45 + 51	2.53	C K J	U	0.985
2,2',3,6'-TeCB	46	—	—	U	—	1.17
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-16. PCB Congener AXYS Analytical Data for Method Evalution: Cross-sectional Composite - Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-1		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	1.02
2,2',4,5'-TeCB	49	49 + 69	1.74	C B J	U	0.845
2,2',4,6-TeCB	50	50 + 53	—	C U	—	0.948
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	3.41	B J	U	0.943
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.598
2,3,3',4-TeCB	55	—	—	U	—	0.806
2,3,3',4'-TeCB	56	—	1.05	B J	U	0.803
2,3,3',5-TeCB	57	—	—	U	—	0.737
2,3,3',5'-TeCB	58	—	—	U	—	0.753
2,3,3',6-TeCB	59	59 + 62 + 75	—	C U	—	0.738
2,3,4,4'-TeCB	60	—	—	U	—	0.797
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	3.84	C B J	—	0.734
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.713
2,3,4',6-TeCB	64	—	1.25	B J	—	0.713
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	1.93	K B J	U	0.737
2,3',4,5-TeCB	67	—	—	U	—	0.649
2,3',4,5'-TeCB	68	—	4.70	—	—	0.7
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.694
2,3',5',6-TeCB	73	—	—	U	—	0.737
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	—	U	—	0.788
3,3',4,5-TeCB	78	—	—	U	—	0.789
3,3',4,5'-TeCB	79	—	—	U	—	0.626
3,3',5,5'-TeCB	80	—	—	U	—	0.692
3,4,4',5-TeCB	81	—	—	U	—	0.779
2,2',3,3',4-PeCB	82	—	—	U	—	1.51
2,2',3,3',5-PeCB	83	83 + 99	1.98	C B J	—	1.32
2,2',3,3',6-PeCB	84	—	—	U	—	1.51
2,2',3,4,4'-PeCB	85	85 + 116 + 117	—	C U	—	1.11
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	3.45	C K B J	U	1.13
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	—	C U	—	1.31
2,2',3,4,6'-PeCB	89	—	—	U	—	1.37
2,2',3,4',5-PeCB	90	90 + 101 + 113	3.36	C B J	—	1.1
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	—	U	—	1.26
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	4.20	C B	—	1.25
2,2',3,5,6'-PeCB	94	—	—	U	—	1.4

Table B2-16. PCB Congener AXYS Analytical Data for Method Evalution: Cross-sectional Composite - Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-1		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.766
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	1.12
2,2',4,6,6'-PeCB	104	—	—	U	—	0.716
2,3,3',4,4'-PeCB	105	—	1.12	B J	U	0.889
2,3,3',4,5-PeCB	106	—	—	U	—	0.844
2,3,3',4',5-PeCB	107	107 + 124	—	C U	—	0.893
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	—	U	—	0.885
2,3,3',4',6-PeCB	110	110 + 115	4.64	C B	U	0.977
2,3,3',5,5'-PeCB	111	—	—	U	—	0.998
2,3,3',5,6-PeCB	112	—	—	U	—	0.974
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.813
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	3.12	B J	—	0.808
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.932
2,3',4,5',6-PeCB	121	—	—	U	—	0.963
2',3,3',4,5-PeCB	122	—	—	U	—	0.953
2',3,4,4',5-PeCB	123	—	—	U	—	0.868
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.937
3,3',4,5,5'-PeCB	127	—	—	U	—	0.895
2,2',3,3',4,4'-HxCB	128	128 + 166	—	C U	—	1.19
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	3.46	C B J	U	1.18
2,2',3,3',4,5'-HxCB	130	—	—	U	—	1.53
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.43
2,2',3,3',4,6'-HxCB	132	—	2.40	J	—	1.46
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.4
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.41
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	—	C U	—	1.31
2,2',3,3',6,6'-HxCB	136	—	—	U	—	0.948
2,2',3,4,4',5-HxCB	137	—	—	U	—	1.33
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.26
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	—	U	—	1.3

Table B2-16. PCB Congener AXYS Analytical Data for Method Evalution: Cross-sectional Composite - Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-1		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.39
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	1.32
2,2',3,4,6,6'-HxCB	145	—	—	U	—	1.02
2,2',3,4',5,5'-HxCB	146	—	—	U	—	1.22
2,2',3,4',5,6-HxCB	147	147 + 149	2.37	C K J	U	1.25
2,2',3,4',5,6'-HxCB	148	—	—	U	—	1.34
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.943
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.884
2,2',4,4',5,5'-HxCB	153	153 + 168	2.46	C K B J	U	1.06
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.762
2,3,3',4,4',5-HxCB	156	156 + 157	—	C U	—	1.12
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	—	U	—	0.893
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.973
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.967
2,3,3',4',5,5'-HxCB	162	—	—	U	—	0.974
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	—	U	—	1.02
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.1
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	—	U	—	0.896
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.882
2,2',3,3',4,4',5-HpCB	170	—	—	U	—	1.52
2,2',3,3',4,4',6-HpCB	171	171 + 173	—	C U	—	1.44
2,2',3,3',4,5,5'-HpCB	172	—	—	U	—	1.47
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	—	U	—	1.31
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.24
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.934
2,2',3,3',4',5,6-HpCB	177	—	—	U	—	1.35
2,2',3,3',5,5',6-HpCB	178	—	—	U	—	1.3
2,2',3,3',5,6,6'-HpCB	179	—	—	U	—	0.914
2,2',3,4,4',5,5'-HpCB	180	180 + 193	1.23	C K B J	U	1.13
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.35
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.28
2,2',3,4,4',5',6-HpCB	183	183 + 185	—	C U	—	1.28
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.92
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.991
2,2',3,4',5,5',6-HpCB	187	—	—	U	—	1.22
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.858

Table B2-16. PCB Congener AXYS Analytical Data for Method Evalution: Cross-sectional Composite - Baseflow

AXYS Workgroup: WG42168		**KC Sample ID:** L56484-1		**Collection Date:** 9/13/2012		
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.842
2,3,3',4,4',5,6-HpCB	190	—	—	U	—	1.05
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	1.02
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.13
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	—	U	—	1.45
2,2',3,3',4,4',5,6-OcCB	195	—	—	U	—	1.56
2,2',3,3',4,4',5,6'-OcCB	196	—	—	U	—	1.79
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	1.22
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	—	C U	—	1.77
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	—	U	—	1.23
2,2',3,3',5,5',6,6'-OcCB	202	—	—	U	—	1.27
2,2',3,4,4',5,5',6-OcCB	203	—	—	U	—	1.64
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	1.22
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	1.08
2,2',3,3',4,4',5,5',6-NoCB	206	—	—	U	—	2.09
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.5
2,2',3,3',4,5,5',6,6'-NoCB	208	—	—	U	—	1.45
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	—	U	—	1.38
Total PCBs	—	—	45.3	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

Table B2-17. PCB Congener AXYS Analytical Data for Method Evaluation: Cross-sectional Composite - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-1	**Collection Date:** 12/3/2012		**Sample Info:** 16 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2-MoCB	1	—	4.68	B	U	0.254
3-MoCB	2	—	4.83	B	U	0.324
4-MoCB	3	—	5.88	K B	U	0.303
2,2'-DiCB	4	—	2.19	J	—	2
2,3-DiCB	5	—	—	U	—	1.66
2,3'-DiCB	6	—	—	U	—	1.55
2,4-DiCB	7	—	—	U	—	1.61
2,4'-DiCB	8	—	3.06	J	—	1.48
2,5-DiCB	9	—	—	U	—	1.51
2,6-DiCB	10	—	—	U	—	1.57
3,3'-DiCB	11	—	20.8	B	—	1.62
3,4-DiCB	12	12 + 13	—	C U	—	1.67
3,4'-DiCB	13	12 + 13	—	C12	—	—
3,5-DiCB	14	—	—	U	—	1.56
4,4'-DiCB	15	—	2.42	J	—	1.65
2,2',3-TriCB	16	—	2.42	K J	U	0.92
2,2',4-TriCB	17	—	2.53	J	—	0.713
2,2',5-TriCB	18	18 + 30	4.54	C K B	U	0.583
2,2',6-TriCB	19	—	0.945	J	—	0.703
2,3,3'-TriCB	20	20 + 28	7.45	C B	U	0.483
2,3,4-TriCB	21	21 + 33	3.79	C B J	—	0.468
2,3,4'-TriCB	22	—	2.78	B J	U	0.52
2,3,5-TriCB	23	—	—	U	—	0.514
2,3,6-TriCB	24	—	—	U	—	0.498
2,3',4-TriCB	25	—	0.904	J	—	0.416
2,3',5-TriCB	26	26 + 29	1.66	C B J	U	0.476
2,3',6-TriCB	27	—	0.533	K J	U	0.481
2,4,4'-TriCB	28	20 + 28	—	C20	—	—
2,4,5-TriCB	29	26 + 29	—	C26	—	—
2,4,6-TriCB	30	18 + 30	—	C18	—	—
2,4',5-TriCB	31	—	5.48	B	U	0.445
2,4',6-TriCB	32	—	1.79	B J	—	0.445
2',3,4-TriCB	33	21 + 33	—	C21	—	—
2',3,5-TriCB	34	—	—	U	—	0.475
3,3',4-TriCB	35	—	0.687	K J	U	0.512
3,3',5-TriCB	36	—	—	U	—	0.481
3,4,4'-TriCB	37	—	2.21	B J	U	0.478
3,4,5-TriCB	38	—	—	U	—	0.491
3,4',5-TriCB	39	—	—	U	—	0.479
2,2',3,3'-TeCB	40	40 + 41 + 71	4.23	C B	—	0.761
2,2',3,4-TeCB	41	40 + 41 + 71	—	C40	—	—
2,2',3,4'-TeCB	42	—	2.21	J	—	0.834
2,2',3,5-TeCB	43	—	—	U	—	0.558
2,2',3,5'-TeCB	44	44 + 47 + 65	22.5	C B	—	0.692
2,2',3,6-TeCB	45	45 + 51	8.31	C	—	0.742
2,2',3,6'-TeCB	46	—	—	U	—	0.872
2,2',4,4'-TeCB	47	44 + 47 + 65	—	C44	—	—

Table B2-17. PCB Congener AXYS Analytical Data for Method Evaluation: Cross-sectional Composite - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-1	**Collection Date:** 12/3/2012		**Sample Info:** 16 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',4,5-TeCB	48	—	—	U	—	0.764
2,2',4,5'-TeCB	49	49 + 69	6.33	C B	—	0.638
2,2',4,6-TeCB	50	50 + 53	3.11	C J	—	0.712
2,2',4,6'-TeCB	51	45 + 51	—	C45	—	—
2,2',5,5'-TeCB	52	—	12.1	B	—	0.695
2,2',5,6'-TeCB	53	50 + 53	—	C50	—	—
2,2',6,6'-TeCB	54	—	—	U	—	0.45
2,3,3',4-TeCB	55	—	—	U	—	0.7
2,3,3',4'-TeCB	56	—	2.91	B J	U	0.698
2,3,3',5-TeCB	57	—	—	U	—	0.628
2,3,3',5'-TeCB	58	—	—	U	—	0.656
2,3,3',6-TeCB	59	59 + 62 + 75	1.17	C K J	U	0.564
2,3,4,4'-TeCB	60	—	1.79	B J	—	0.694
2,3,4,5-TeCB	61	61 + 70 + 74 + 76	12.6	C B	—	0.642
2,3,4,6-TeCB	62	59 + 62 + 75	—	C59	—	—
2,3,4',5-TeCB	63	—	—	U	—	0.607
2,3,4',6-TeCB	64	—	3.48	B J	—	0.551
2,3,5,6-TeCB	65	44 + 47 + 65	—	C44	—	—
2,3',4,4'-TeCB	66	—	5.05	B	—	0.615
2,3',4,5-TeCB	67	—	—	U	—	0.563
2,3',4,5'-TeCB	68	—	4.48	—	—	0.601
2,3',4,6-TeCB	69	49 + 69	—	C49	—	—
2,3',4',5-TeCB	70	61 + 70 + 74 + 76	—	C61	—	—
2,3',4',6-TeCB	71	40 + 41 + 71	—	C40	—	—
2,3',5,5'-TeCB	72	—	—	U	—	0.582
2,3',5',6-TeCB	73	—	—	U	—	0.558
2,4,4',5-TeCB	74	61 + 70 + 74 + 76	—	C61	—	—
2,4,4',6-TeCB	75	59 + 62 + 75	—	C59	—	—
2',3,4,5-TeCB	76	61 + 70 + 74 + 76	—	C61	—	—
3,3',4,4'-TeCB	77	—	1.19	K B J	U	0.642
3,3',4,5-TeCB	78	—	—	U	—	0.687
3,3',4,5'-TeCB	79	—	—	U	—	0.553
3,3',5,5'-TeCB	80	—	—	U	—	0.613
3,4,4',5-TeCB	81	—	—	U	—	0.616
2,2',3,3',4-PeCB	82	—	2.31	J	—	1.16
2,2',3,3',5-PeCB	83	83 + 99	10.5	C B	—	1.01
2,2',3,3',6-PeCB	84	—	4.84	—	—	1.17
2,2',3,4,4'-PeCB	85	85 + 116 + 117	3.20	C J	—	0.863
2,2',3,4,5-PeCB	86	86 + 87 + 97 + 108 + 119 + 125	12.7	C B	U	0.886
2,2',3,4,5'-PeCB	87	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3,4,6-PeCB	88	88 + 91	2.66	C K J	U	1.01
2,2',3,4,6'-PeCB	89	—	—	U	—	1.07
2,2',3,4',5-PeCB	90	90 + 101 + 113	17.5	C B	—	0.883
2,2',3,4',6-PeCB	91	88 + 91	—	C88	—	—
2,2',3,5,5'-PeCB	92	—	3.41	B J	—	1.02
2,2',3,5,6-PeCB	93	93 + 95 + 98 + 100 + 102	16.3	C B	—	0.97
2,2',3,5,6'-PeCB	94	—	—	U	—	1.06

Table B2-17. PCB Congener AXYS Analytical Data for Method Evaluation: Cross-sectional Composite - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-1	**Collection Date:** 12/3/2012		**Sample Info:** 16 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,5',6-PeCB	95	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',3,6,6'-PeCB	96	—	—	U	—	0.616
2,2',3',4,5-PeCB	97	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,2',3',4,6-PeCB	98	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,4',5-PeCB	99	83 + 99	—	C83	—	—
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5,5'-PeCB	101	90 + 101 + 113	—	C90	—	—
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	—	C93	—	—
2,2',4,5',6-PeCB	103	—	—	U	—	0.851
2,2',4,6,6'-PeCB	104	—	—	U	—	0.554
2,3,3',4,4'-PeCB	105	—	6.79	B	—	0.772
2,3,3',4,5-PeCB	106	—	—	U	—	0.814
2,3,3',4',5-PeCB	107	107 + 124	0.936	C J	—	0.837
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3,3',4,6-PeCB	109	—	1.48	J	—	0.819
2,3,3',4',6-PeCB	110	110 + 115	24.4	C B	—	0.759
2,3,3',5,5'-PeCB	111	—	—	U	—	0.767
2,3,3',5,6-PeCB	112	—	—	U	—	0.772
2,3,3',5',6-PeCB	113	90 + 101 + 113	—	C90	—	—
2,3,4,4',5-PeCB	114	—	—	U	—	0.747
2,3,4,4',6-PeCB	115	110 + 115	—	C110	—	—
2,3,4,5,6-PeCB	116	85 + 116 + 117	—	C85	—	—
2,3,4',5,6-PeCB	117	85 + 116 + 117	—	C85	—	—
2,3',4,4',5-PeCB	118	—	16.2	B	—	0.743
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
2,3',4,5,5'-PeCB	120	—	—	U	—	0.714
2,3',4,5',6-PeCB	121	—	—	U	—	0.76
2',3,3',4,5-PeCB	122	—	—	U	—	0.888
2',3,4,4',5-PeCB	123	—	—	U	—	0.782
2',3,4,5,5'-PeCB	124	107 + 124	—	C107	—	—
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	—	C86	—	—
3,3',4,4',5-PeCB	126	—	—	U	—	0.86
3,3',4,5,5'-PeCB	127	—	—	U	—	0.816
2,2',3,3',4,4'-HxCB	128	128 + 166	5.12	C	—	1.16
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	29.6	C B	—	1.1
2,2',3,3',4,5'-HxCB	130	—	2.10	J	—	1.48
2,2',3,3',4,6-HxCB	131	—	—	U	—	1.37
2,2',3,3',4,6'-HxCB	132	—	11.5	—	—	1.42
2,2',3,3',5,5'-HxCB	133	—	—	U	—	1.31
2,2',3,3',5,6-HxCB	134	134 + 143	—	C U	—	1.33
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	8.51	C K B	U	0.845
2,2',3,3',6,6'-HxCB	136	—	2.46	J	—	0.618
2,2',3,4,4',5-HxCB	137	—	1.72	K J	U	1.24
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	—	C129	—	—
2,2',3,4,4',6-HxCB	139	139 + 140	—	C U	—	1.23
2,2',3,4,4',6'-HxCB	140	139 + 140	—	C139	—	—
2,2',3,4,5,5'-HxCB	141	—	5.44	—	—	1.3

Table B2-17. PCB Congener AXYS Analytical Data for Method Evaluation: Cross-sectional Composite - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-1	**Collection Date:** 12/3/2012		**Sample Info:** 16 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,2',3,4,5,6-HxCB	142	—	—	U	—	1.4
2,2',3,4,5,6'-HxCB	143	134 + 143	—	C134	—	—
2,2',3,4,5',6-HxCB	144	—	—	U	—	0.851
2,2',3,4,6,6'-HxCB	145	—	—	U	—	0.676
2,2',3,4',5,5'-HxCB	146	—	6.01	K	U	1.13
2,2',3,4',5,6-HxCB	147	147 + 149	20.6	C	—	1.2
2,2',3,4',5,6'-HxCB	148	—	—	U	—	0.894
2,2',3,4',5',6-HxCB	149	147 + 149	—	C147	—	—
2,2',3,4',6,6'-HxCB	150	—	—	U	—	0.646
2,2',3,5,5',6-HxCB	151	135 + 151 + 154	—	C135	—	—
2,2',3,5,6,6'-HxCB	152	—	—	U	—	0.606
2,2',4,4',5,5'-HxCB	153	153 + 168	25.0	C B	—	1.01
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	—	C135	—	—
2,2',4,4',6,6'-HxCB	155	—	—	U	—	0.49
2,3,3',4,4',5-HxCB	156	156 + 157	3.90	C J	—	1.13
2,3,3',4,4',5'-HxCB	157	156 + 157	—	C156	—	—
2,3,3',4,4',6-HxCB	158	—	2.80	J	—	0.884
2,3,3',4,5,5'-HxCB	159	—	—	U	—	0.96
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4,5',6-HxCB	161	—	—	U	—	0.922
2,3,3',4',5,5'-HxCB	162	—	—	U	—	1.01
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	—	C129	—	—
2,3,3',4',5',6-HxCB	164	—	2.71	J	—	0.933
2,3,3',5,5',6-HxCB	165	—	—	U	—	1.07
2,3,4,4',5,6-HxCB	166	128 + 166	—	C128	—	—
2,3',4,4',5,5'-HxCB	167	—	1.52	J	—	0.864
2,3',4,4',5',6-HxCB	168	153 + 168	—	C153	—	—
3,3',4,4',5,5'-HxCB	169	—	—	U	—	0.932
2,2',3,3',4,4',5-HpCB	170	—	6.61	—	—	1.41
2,2',3,3',4,4',6-HpCB	171	171 + 173	2.49	C J	—	1.35
2,2',3,3',4,5,5'-HpCB	172	—	1.81	J	—	1.36
2,2',3,3',4,5,6-HpCB	173	171 + 173	—	C171	—	—
2,2',3,3',4,5,6'-HpCB	174	—	6.47	—	—	1.22
2,2',3,3',4,5',6-HpCB	175	—	—	U	—	1.16
2,2',3,3',4,6,6'-HpCB	176	—	—	U	—	0.861
2,2',3,3',4',5,6-HpCB	177	—	4.44	—	—	1.29
2,2',3,3',5,5',6-HpCB	178	—	1.31	J	—	1.21
2,2',3,3',5,6,6'-HpCB	179	—	2.50	J	—	0.836
2,2',3,4,4',5,5'-HpCB	180	180 + 193	16.2	C B	—	1.09
2,2',3,4,4',5,6-HpCB	181	—	—	U	—	1.27
2,2',3,4,4',5,6'-HpCB	182	—	—	U	—	1.19
2,2',3,4,4',5',6-HpCB	183	183 + 185	4.60	C	—	1.18
2,2',3,4,4',6,6'-HpCB	184	—	—	U	—	0.831
2,2',3,4,5,5',6-HpCB	185	183 + 185	—	C183	—	—
2,2',3,4,5,6,6'-HpCB	186	—	—	U	—	0.921
2,2',3,4',5,5',6-HpCB	187	—	9.00	—	—	1.13
2,2',3,4',5,6,6'-HpCB	188	—	—	U	—	0.74

Table B2-17. PCB Congener AXYS Analytical Data for Method Evaluation: Cross-sectional Composite - Storm Event

AXYS Workgroup: WG42168		**KC Sample ID:** L56869-1	**Collection Date:** 12/3/2012		**Sample Info:** 16 aliquots	
Compound	**IUPAC #**	**Coelutions**	**Conc. (pg/L)**	**Lab Qual**	**Val Qual**	**SDL (pg/L)**
2,3,3',4,4',5,5'-HpCB	189	—	—	U	—	0.789
2,3,3',4,4',5,6-HpCB	190	—	1.86	J	—	1.02
2,3,3',4,4',5',6-HpCB	191	—	—	U	—	0.967
2,3,3',4,5,5',6-HpCB	192	—	—	U	—	1.1
2,3,3',4',5,5',6-HpCB	193	180 + 193	—	C180	—	—
2,2',3,3',4,4',5,5'-OcCB	194	—	4.21	J	—	1.2
2,2',3,3',4,4',5,6-OcCB	195	—	1.81	J	—	1.28
2,2',3,3',4,4',5,6'-OcCB	196	—	1.67	J	—	1.23
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	—	C U G	—	0.839
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	5.56	C K	U	1.27
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	—	C198	—	—
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	—	C197	—	—
2,2',3,3',4,5',6,6'-OcCB	201	—	0.887	J	—	0.823
2,2',3,3',5,5',6,6'-OcCB	202	—	1.26	J	—	0.872
2,2',3,4,4',5,5',6-OcCB	203	—	3.44	J	—	1.19
2,2',3,4,4',5,6,6'-OcCB	204	—	—	U	—	0.84
2,3,3',4,4',5,5',6-OcCB	205	—	—	U	—	0.884
2,2',3,3',4,4',5,5',6-NoCB	206	—	3.28	J	—	1.44
2,2',3,3',4,4',5,6,6'-NoCB	207	—	—	U	—	1.18
2,2',3,3',4,5,5',6,6'-NoCB	208	—	1.37	J	—	1.13
2,2',3,3',4,4',5,5',6,6'-DeCB	209	—	2.75	B J	—	1.15
Total PCBs	—	—	423	—	J	—

B = Detected in method blank
J = Estimated value
U = Not detected
C = Coelution
C# = Coelution with #, concentration listed under #
K = Did not meet all parameter identification criteria. Value is estimated maximum potential concentration and was requalified as non-detect.
G = Lock mass interference present

Conc = Concentration
Lab Qual = Lab Qualifier
Val Qual= Validation Qualifier
SDL = Sample Detection Limit

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Appendix C:
Data Validation Reports

Technical Memorandum

Date: March 29, 2013

To: Deb Lester, King County Toxicology and Contaminant Assessment Group
Debra Williston, King County Toxicology and Contaminant Assessment Group

From: Scott Mickelson, King County Marine and Sediment Assessment Group

Subject: Data Validation Report
Green River Water Samples

This technical memorandum summarizes the data validation review performed on Green River water samples collected between September 13, 2011 and December 3, 2012. These samples included 18 baseflow bulk water samples, 38 storm bulk water samples, six baseflow integrated water samples, six storm integrated water samples, and one field blank. All samples were submitted for analysis of total and dissolved organic carbon, total suspended solids, total and dissolved arsenic, and polycyclic aromatic hydrocarbons (PAHs).

1.0 Introduction

This data validation review has been based, in part, on guidance found in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008) and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (EPA 2010), as well as the project sampling and analysis plan (SAP) (King County 2011) and SAP addendum (King County 2012). Materials reviewed included Batch Reports and Analytical Quality Control (QC) Reports downloaded from the King County Laboratory Information System (LIMS) database, along with data anomaly forms, all of which are included in this memorandum as Attachment A. The QC parameters reviewed during this data validation include; holding time, method blanks, spike blanks, spike blank duplicates, laboratory control samples, matrix spikes, matrix spike duplicates, laboratory duplicates, and surrogates, which are described below.

1.1 Holding Time

The analytical holding time is a method-specific timeframe, during which sample preparation and analysis should occur to provide valid data. All samples should be analyzed within this prescribed holding time.

1.2 Method Blank

A method blank is an aliquot of clean reference matrix that is generally processed through the entire analytical procedure. Analysis of the method blank is used to evaluate the levels of

contamination that might be associated with the processing and analysis of samples. All method blank results should be less than the method detection limit (MDL). Method blanks were included with all analyses.

1.3 Spike Blank

A spike blank is an aliquot of the clean reference matrix used for the method blank, to which a known concentration of target analyte(s) has been added. The spiked aliquot is processed through the entire analytical procedure. Analysis of the spike blank is used as an indicator of method accuracy. Spike blanks were used as part of the QC regimen for all analyses with the exception of total suspended solids. Spike blanks are not addressed in the *National Functional Guidelines*, however, King County has method-defined or empirically-derived control limits for spike blank analytes, which are shown on the attached QC reports. Spike blank results should be within these control limits. During the planning phase of this project, the King County Environmental Laboratory artificially set the laboratory QC limits for PAH spike blank recoveries at 40 – 160%, due to a lack of sufficient data to control chart the spike blank recoveries for this analytical method. These are the control limits shown on the attached QC reports for PAHs (Attachment A). During the course of the project and another concurrent project, the large number of samples (~200) provided enough data to allow control charting and derivation of empirical QC limits. The new empirically-derived PAH spike blank control limits are shown in the following table.

PAH Compound	SB Lower QC Limit (%)	SB Upper QC Limit (%)
Acenaphthene	45	114
Acenaphthylene	56	124
Anthracene	47	107
Fluorene	54	122
2-Methylnaphthalene	21	136
Naphthalene	47	100
Phenanthrene	57	104
Benzo(a)anthracene	86	111
Benzo(a)pyrene	40	135
Benzo(b,j,k)fluoranthene	71	131
Benzo(g,h,i)perylene	63	126
Chrysene	77	111
Dibenzo(a,h)anthracene	61	139
Fluoranthene	73	116
Indeno(1,2,3-c,d)pyrene	58	137
Pyrene	66	143

1.4 Spike Blank Duplicate

A spike blank duplicate is a second aliquot of clean reference matrix fortified with a known concentration of a target analyte(s). The spiked blank is processed through the entire analytical procedure. Spike blank duplicates were analyzed as part of the QC regimen for PAH analysis. Analysis of the spike blank duplicate is used as an additional indicator of method accuracy as well as an indicator of method precision. The relative percent difference (RPD) between spike blank duplicate results are not addressed in the *National Functional Guidelines.* King County

used a project-specific QC limit of 40% for the RPD between spike blank duplicate results (King County 2011, 2012). The RPD for spike blank duplicate results should be less than this QC limit.

1.5 Matrix Spike

A matrix spike is a sample aliquot fortified with a known concentration of a target analyte(s). The spiked sample is processed through the entire analytical procedure. Analysis of the matrix spike is used as an indicator of sample matrix effect on the recovery of target analyte(s). Matrix spike analysis was used as part of the QC regimen for total and dissolved arsenic, total and dissolved organic carbon, and PAH analyses. Matrix spike recoveries for total and dissolved arsenic should be within 75 to 125% (EPA 2010). *National Functional Guidelines* does not address matrix spikes for organic carbon and PAH analyses. The King County Environmental Laboratory uses QC limits of 75 to 125% for total and dissolved organic carbon.

During the planning phase of this project, the King County Environmental Laboratory artificially set the laboratory QC limits for PAH matrix spike recoveries at 40 – 160%, due to a lack of sufficient data to control chart the spike blank recoveries for this analytical method. These are the control limits shown on the attached QC reports for PAHs (Attachment A). During the course of the project and another concurrent project, the large number of samples (~200) provided enough data to allow control charting and derivation of empirical QC limits. The new empirically-derived PAH matrix spike control limits are shown in the following table. PAH matrix spike recoveries should be within these control limits.

PAH Compound	MS Lower QC Limit (%)	MS Upper QC Limit (%)
Acenaphthene	38	90
Acenaphthylene	48	107
Anthracene	49	112
Fluorene	42	113
2-Methylnaphthalene	28	97
Naphthalene	31	80
Phenanthrene	51	98
Benzo(a)anthracene	83	114
Benzo(a)pyrene	27	160
Benzo(b,j,k)fluoranthene	43	146
Benzo(g,h,i)perylene	26	140
Chrysene	68	115
Dibenzo(a,h)anthracene	24	154
Fluoranthene	65	125
Indeno(1,2,3-c,d)pyrene	15	164
Pyrene	62	130

1.6 Matrix Spike Duplicate

A matrix spike duplicate is a second sample aliquot fortified with a known concentration of a target analyte(s). The spiked sample is processed through the entire analytical procedure. Matrix spike duplicates were analyzed as part of the QC regimen for PAH analysis. Analysis of the matrix spike duplicate is used as an additional indicator of sample matrix effect on the recovery of target analyte(s) as well as an indicator of method precision. The King County

Environmental Laboratory used an RPD of 40% as the QC limit for this project. The RPDs between matrix spike and matrix spike duplicate results should all be below this limit.

1.7 Laboratory Duplicate

A laboratory duplicate is a second aliquot of a sample, processed concurrently and in an identical manner with the original sample. Analysis of the laboratory duplicate is used as an indicator of method precision. The laboratory duplicate can also be used to provide information regarding the homogeneity of the sample matrix. QC results are reported as a relative percent difference (RPD) between the sample and laboratory duplicate results. Laboratory duplicates were used as part of the QC regimen for all analyses performed on this dataset. The RPD between laboratory duplicate results should be less than 20% for all total and dissolved arsenic analyses (EPA 2010). *National Functional Guidelines* does not address laboratory duplicates for organic or conventional analyses. The King County Environmental Laboratory uses RPD QC limits of 20% for total and dissolved organic carbon and 25% for total solids. For this project, an RPD of 40% was used as the laboratory QC limit for PAH laboratory duplicates. The RPDs for all laboratory duplicate results should be below these limits.

1.8 Surrogates

A surrogate is a known concentration of non-target analyte which is added to each sample (both analytical and QC samples) prior to extraction and analysis for all trace organic analyses. Surrogate recovery is used as a sample-specific indication of method or matrix bias for target analytes. The surrogate is selected to behave in a similar manner to the target analytes.

The King County Environmental Laboratory used two surrogate compounds during analysis of PAHs, 2-fluorobiphenyl and d14-terphenyl. During the planning phase of this project, the King County Environmental Laboratory artificially set the laboratory QC limits for surrogate recoveries at 40 – 160%, due to a lack of sufficient data to control chart the surrogate recoveries for this analytical method. These are the control limits shown on the attached QC reports for PAHS (Attachment A). During the course of the project and another concurrent project, the large number of samples (~200) provided enough data to allow control charting and derivation of empirical QC limits. The empirically-derived surrogate recovery limits are 23 to 124% for 2-fluorobiphenyl and 63 to 154% for d14-terphenyl. Surrogate recoveries for all analytical and QC samples should be within these control limits. These two surrogate compounds are not addressed in *National Functional Guidelines*.

2.0 CONVENTIONALS

A total of 69 samples were submitted for analysis of total and dissolved organic carbon and total suspended solids. These 69 samples included 18 baseflow bulk water samples, 38 storm bulk water samples, 6 baseflow integrated water samples, 6 storm integrated water samples, and one field blank.

2.1 Total and Dissolved Organic Carbon

Total and dissolved organic carbon (TOC/DOC) analysis was performed by Standard Method SM5310-B (APHA 1998), which is a high-temperature combustion/infrared detection method.

Each work group included analysis of a minimum of five QC samples; method blanks, spike blanks, laboratory control samples, matrix spikes, and laboratory duplicates.

2.2.1 Holding Time
All 69 TOC/DOC samples were analyzed within the prescribed 28-day holding time.

2.2.2 Method Blanks
TOC/DOC results in all method blanks were less than the MDL.

2.2.3 Spike Blanks
TOC/DOC spike blank were all within the laboratory QC limits of 80 to 120%, ranging from 89 to 111%.

2.2.4 Laboratory Control Samples
TOC/DOC laboratory control sample recoveries were all within the 85 to 115% QC limits, ranging from 86 to 109%.

2.2.5 Matrix Spikes
TOC/DOC matrix spike recoveries were all within the 75 to 125% QC limits, ranging from 88 to 123%.

2.2.6 Laboratory Duplicates
The RPDs between TOC/DOC laboratory duplicate results were all less than the 20% QC limit, ranging from 1 to 15%.

2.2.7 Data Integrity Issue
During the course of data analysis, it was discovered that the use of an acetone rinse on field sampling equipment for this project likely lead to analytical bias resulting in high-biased TOC and DOC sample results in the 18 baseflow samples. Project managers, laboratory personnel, and the data validator discussed the issue and the decision was reached to reject all TOC and DOC results in samples L54147-1 through -4, L54148-1 through -2, L54149-1 through-2, L54090-1 through -3, L54117-1 through -3, and L54125-1, -3, and -4.

2.2 Total Suspended Solids
Total suspended solids (TSS) analysis was performed by gravimetric determination following Standard Method SM2540-D (APHA 1998). Each work group included analysis of a minimum of three QC samples; method blanks, laboratory control samples, and laboratory duplicates.

2.2.1 Holding Time
All 69 TSS samples were analyzed within the prescribed 7-day holding time.

2.2.2 Method Blanks
TSS results in all method blanks were less than the MDL.

2.2.3 Laboratory Control Samples
TSS recoveries in all laboratory control samples were within the 80 to 120% QC limits, ranging from 84 to 115%.

2.2.4 Laboratory Duplicates
The RPDs between TSS laboratory duplicate results were all less than the 25% QC limit, ranging from 0 to 20%.

3.0 Total and Dissolved Arsenic

A total of 69 samples were submitted for analysis of total and dissolved arsenic by inductively coupled plasma-mass spectrometry following EPA Method 200.8 (EPA 1994). These 69 samples included 18 baseflow bulk water samples, 38 storm bulk water samples, 6 baseflow integrated water samples, 6 storm integrated water samples, and one field blank. Associated QC samples analyzed with each work group included a method blank, a spike blank, a matrix spike, and a laboratory duplicate.

3.1 Holding Time
All 69 total and dissolved arsenic samples were analyzed within the method-specified 6-month holding time. Dissolved arsenic samples, however, were not filtered within the method-specified 15-minute holding time. This can have an impact on data quality for dissolved metals, dependent on sample turbidity, sample container, and pH of the sample. As a result of this missed filtering holding time, the dissolved arsenic result for all 69 samples should be qualified with a “J” flag and considered estimated, with an unknown bias.

3.2 Method Blanks
All total and dissolved arsenic method blank results were less than the MDL, indicating that laboratory contamination was not an issue during sample digestion and analysis.

3.3 Spike Blanks
All total metals spike blank results were within the empirically-derived laboratory QC limits of 85 to 115%, ranging from 95 to 108%, indicating acceptable overall method accuracy.

3.4 Matrix Spikes
All total and dissolved arsenic matrix spike recoveries were within the 75 to 125% laboratory QC limits recommended in *National Functional Guidelines*, ranging from 92 to 110%, indicating acceptable matrix-specific method accuracy.

3.5 Laboratory Duplicates
The RPDs between total and dissolved arsenic laboratory duplicate results were all less than the 20% QC limit recommended in *National Functional Guidelines*, ranging from 0 to 9%

4.0 Polycyclic Aromatic Hydrocarbons (PAHs)

A total of 69 samples were submitted for analysis of 16 PAH compounds by gas chromatography with mass spectroscopy (GC-MS) following EPA Methods 3520C/8270D – SW846 (EPA 2007). This method was modified by the use of a large volume injector (LVI) and analysis using selected ion monitoring (SIM). These 69 samples included 18 baseflow bulk water samples, 38 storm bulk water samples, 6 baseflow integrated water samples, 6 storm integrated water samples, and one field blank. Associated QC samples included method blanks, spike blanks/spike blank duplicates, matrix spikes/matrix spike duplicates, and laboratory duplicates. Note that not all of the aforementioned QC samples were analyzed with each QC batch (workgroup), however, a method blank, spike blank, matrix spike, and one precision analysis (spike blank duplicate, matrix spike duplicate, or laboratory duplicate) were analyzed with each work group. Surrogates were included with every PAH sample analysis, both for analytical and QC samples.

4.1 Holding Time

All 69 samples were extracted within the 14-day holding time and analyzed within the subsequent 40-day holding time.

4.2 Method Blanks

Between 5 and 12 PAH compounds were detected in every method blank associated with this data set. All of the positive PAH method blank results were detected at concentrations less than the reporting detection limit (RDL), which is the limit of practical quantitation. Based on the recommendations in *National Function Guidelines* (EPA 2008), the following data qualification regime should be employed as a result of method blank contamination:

- When both the method blank concentration and the sample concentration are less than the RDL, the sample value should be reported as the numeric RDL value and the result should be qualified with a "U" flag and considered undetected.
- When the method blank concentration is less than the RDL and the sample concentration is greater than the RDL but less than 10 times the method blank concentration, the sample value should be used as reported but the result should be qualified with a "U" flag and considered undetected.
- When the method blank concentration is less than the RDL and the sample concentration is greater than the RDL and greater than 10 times the method blank concentration, the sample result may be used as reported, without qualification.

4.3 Spike Blanks/Spike Blank Duplicates

The naphthalene spike blank recovery of 32% in work group WG124534 was below the empirically-derived lower QC limit of 47%. Naphthalene results for five of the six samples associated with that work group have already been qualified with a "U" due to method blank contamination. Because of the conflicting bias issues between low spike blank recovery (potential low bias) and method blank contamination (potential high bias), data for these five samples (L56869-1 through -5) should be qualified with a "UJ" flag with an unknown bias. The naphthalene results in the sixth sample, L56869-6, should be qualified with a "J" flag and

considered estimated with an unknown bias. All other spike blank recoveries associated with this dataset were within the empirically-derived laboratory QC limits shown in Section 1.3. When spike blank duplicates were analyzed, the RPDs between spike blank duplicate results were all below the 40% laboratory QC limit.

4.4 Matrix Spikes/Matrix Spike Duplicates

The pyrene matrix spike recovery of 165% in work group LWG119622 exceeded the empirically-derived upper QC limit of 130%. The pyrene result in sample L54686-1, on which the matrix spike was performed has already been qualified with a "U" flag due to method blank contamination. Because of the high matrix spike recovery, coupled with the method blank contamination, the pyrene data in this sample should be qualified with a "UJ" flag and considered estimated with a high bias.

The naphthalene matrix spike recovery of 17% in work group WG119922 was below the empirically-derived lower QC limit of 31%. The naphthalene result in sample L55077-1 should be qualified with a "J" flag and considered an estimate with a low bias.

All other matrix spike recoveries were within the empirically-derived QC limits shown in Section 1.5. When matrix spike duplicates were performed, all RPDs between matrix spike and matrix spike duplicate recoveries were below the 40% laboratory QC limit.

4.5 Laboratory Duplicates

The RPDs between naphthalene results in each laboratory duplicate analyzed in association with the bulk storm water samples exceeded the 40% laboratory QC limit, ranging from 50 to 162%. As a result of consistent low precision measurement, detected naphthalene results in all bulk storm water samples should be qualified with a "J" flag and considered estimated with an unknown bias (see Table 2 attached).

The RPDs between laboratory duplicate results for indeno(1,2,3-c,d)pyrene (46%) and anthracene (87%) in work group WG118646 both exceeded the 40% laboratory QC limit. Results for these two compounds in sample L54681-3 should be qualified with a "J" flag and considered estimated with an unknown bias.

The RPD of 58% between laboratory duplicate results for anthracene in work group WG119622 exceeded the 40% laboratory QC limit. The anthracene result in sample L54686-2 should be qualified with a "J" flag and considered estimated with an unknown bias.

The RPDs between results for 15 of 16 PAH compounds in the laboratory duplicate associated with work group WG119922 all exceeded the 40% laboratory QC limit, ranging from 56 to 200%. The RPD between laboratory duplicate results for 2-methylnaphthalene was 0%. Results for all PAH compounds except 2-methylnaphthalene in sample L55077-2 should be qualified with a "J" flag and considered estimated with an unknown bias.

The RPD of 48% between laboratory duplicate results for anthracene in work group WG120336 exceeded the 40% laboratory QC limit. The anthracene result in sample L55284-2 should be

qualified with a “J” flag and considered estimated with an unknown bias. RPDs between all other laboratory duplicate results were less than the 40% laboratory QC limit.

4.6 Surrogates

Surrogate recoveries in both analytical and QC samples were with the empirically-derived QC limits referenced in Section 1.8 for all samples in this dataset.

5.0 Data Usability

As a general data reporting format, conventional parameters, arsenic and PAH sample results that are reported as “<MDL” should be assigned a “U” flag in all cases and considered undetected. Conventional, arsenic, and PAH sample results that are reported as “<RDL” should be assigned a “J” flag in all cases and considered estimated with an unknown bias. Tables 1 through 4 at the end of this narrative provide the appropriate data qualifier flags, if required, for every sample/analyte in this data set. These flags are based on the data quality issues summarized in Sections 2.0, 3.0, and 4.0. LIMS Batch and QC reports and data anomaly forms are provided as Attachment A.

6.0 References

APHA 1998. *Standard Methods for the Examination of Water and Wastewater, 20th Edition.* American Public Health Association. Washington, D.C.

EPA 1994. *Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma – Mass Spectrometry*. *Method 200.8, Revision 5.4*. United States Environmental Protection Agency, Office of Research and Development. Cincinnati, Ohio.

EPA 2007. *Test Methods for Evaluating Solid Waste*. *Laboratory Manual – Physical/Chemical Methods, SW-846, 3rd Edition, Update IVB*. United State Environmental Protection Agency, Office of Solid Waste and Emergency Response. Washington, D.C.

EPA 2008. *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*. OSWER 9240.1-48, USEPA-540-R-08-01. United States Environmental Protection Agency. Washington, D.C. June 2001.

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King County 2011. *Green River Loading Study Sampling and Analysis Plan*. King County Department of Natural Resources and Parks. Seattle, Washington.

King County 2012. *Integrated Water Sample Collection Addendum – Green River Study Sampling and Analysis Plan*. King County Department of Natural Resources and Parks. Seattle, Washington.

ATTACHMENT A

LIMS BATCH AND QC REPORTS

LIMSView Batch Report for Green River Baseflow Samples - Data Validation for Conventionals

WG117453 - Dissolved Organic Carbon/Total Organic Carbon

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L53667-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L53667-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L53667-3	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L53667-4	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L53667-5	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L53667-6	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	FRESH WTR	09/06/11	09/07/11	09/13/11	
L54036-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	BLANK WTR	08/29/11	08/30/11	09/13/11	
L54040-1	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	09/07/11	09/08/11	09/13/11	
L54040-2	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	09/07/11	09/08/11	09/13/11	
L54040-3	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	09/07/11	09/08/11	09/13/11	
L54040-4	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	09/07/11	09/08/11	09/13/11	
L54063-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/13/11	09/14/11	09/14/11	
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/06/11	09/08/11	09/13/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/06/11	09/08/11	09/13/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/06/11	09/08/11	09/13/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/07/11	09/09/11	09/13/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/07/11	09/09/11	09/13/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/07/11	09/09/11	09/13/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/07/11	09/09/11	09/13/11	
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/12/11	09/14/11	09/14/11	
WG117453-1	MB		CVDOC	BLANK WTR		09/07/11	09/13/11	MB1 110907 7:46
WG117453-2	LCS		CVDOC	BLANK WTR		09/13/11	09/13/11	LEVEL1
WG117453-3	SB		CVDOC	BLANK WTR		09/07/11	09/13/11	WG117453-1
WG117453-4	LD		CVDOC	FRESH WTR		09/07/11	09/13/11	L53667-2
WG117453-5	MS		CVDOC	FRESH WTR		09/07/11	09/13/11	L53667-3
WG117453-6	MB		CVDOC	BLANK WTR		08/30/11	09/13/11	MB1 110830 11:30
WG117453-7	MS		CVDOC	BLANK WTR		08/30/11	09/13/11	L54036-1
WG117453-8	MB		CVDOC	BLANK WTR		09/08/11	09/13/11	MB1 110908 14:00
WG117453-9	LD		CVDOC	FRESH WTR		09/08/11	09/13/11	L54040-3
WG117453-10	MS		CVDOC	FRESH WTR		09/08/11	09/13/11	L54090-3
WG117453-11	MB		CVDOC	BLANK WTR		09/09/11	09/13/11	MB1 110909 12:00
WG117453-12	LCS		CVDOC	BLANK WTR		09/13/11	09/13/11	LEVEL1
WG117453-13	LD		CVDOC	FRESH WTR		09/09/11	09/13/11	L54117-2

WG117453-14	MS			CVDOC	FRESH WTR		09/09/11	09/13/11	L54117-4
WG117453-15	MB			CVTOC	BLANK WTR		09/13/11	09/13/11	MB1 110913
WG117453-16	LCS			CVTOC	BLANK WTR		09/14/11	09/14/11	LEVEL1
WG117453-17	MB			CVTOC	BLANK WTR		09/14/11	09/14/11	MB1 110914
WG117453-18	LCS			CVTOC	BLANK WTR		09/14/11	09/14/11	LEVEL1
WG117453-19	SB			CVTOC	BLANK WTR		09/14/11	09/14/11	WG117453-17
WG117453-20	LD			CVTOC	FRESH WTR		09/14/11	09/14/11	L54125-3
WG117453-21	MS			CVTOC	FRESH WTR		09/14/11	09/14/11	L54125-4
WG117453-22	MB			CVDOC	BLANK WTR		09/14/11	09/14/11	MB1 110914 10:00
WG117453-23	LCS			CVDOC	BLANK WTR		09/14/11	09/14/11	LEVEL1
WG117453-24	SB			CVDOC	BLANK WTR		09/14/11	09/14/11	WG117453-22
WG117453-25	LD			CVDOC	FRESH WTR		09/14/11	09/14/11	L54125-3
WG117453-26	MS			CVDOC	FRESH WTR		09/14/11	09/14/11	L54125-4

WG117545 - Dissolved Organic Carbon/Total Organic Carbon

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L54020-1	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	09/19/11	09/20/11	09/21/11	
L54020-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	09/19/11	09/20/11	09/20/11	
L54020-2	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	09/19/11	09/20/11	09/21/11	
L54020-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	09/19/11	09/20/11	09/20/11	
L54020-3	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	09/19/11	09/20/11	09/21/11	
L54020-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	09/19/11	09/20/11	09/20/11	
L54021-1	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	09/19/11	09/20/11	09/21/11	
L54021-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	09/19/11	09/20/11	09/20/11	
L54021-2	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	09/19/11	09/20/11	09/21/11	
L54021-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	09/19/11	09/20/11	09/20/11	
L54021-3	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	09/19/11	09/20/11	09/21/11	
L54021-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	09/19/11	09/20/11	09/20/11	
L54073-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/15/11	09/19/11	09/19/11	
L54073-3	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/15/11	09/19/11	09/19/11	
L54073-5	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/19/11	09/19/11	09/19/11	
L54075-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/14/11	09/19/11	09/19/11	
L54076-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	09/19/11	09/19/11	09/19/11	
L54126-1	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	09/13/11	09/15/11	09/21/11	
L54126-1	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	09/13/11	09/20/11	09/20/11	
L54126-3	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	09/13/11	09/15/11	09/21/11	
L54126-3	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	09/13/11	09/20/11	09/20/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/11	09/15/11	09/21/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/11	09/20/11	09/20/11	
L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/11	09/15/11	09/21/11	

L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/11	09/20/11	09/20/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/11	09/15/11	09/21/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/11	09/20/11	09/20/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/11	09/15/11	09/21/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/11	09/20/11	09/20/11	
L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/14/11	09/16/11	09/20/11	
L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/14/11	09/19/11	09/19/11	
L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/14/11	09/16/11	09/20/11	
L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/14/11	09/19/11	09/19/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/15/11	09/16/11	09/21/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/15/11	09/19/11	09/19/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/15/11	09/16/11	09/21/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/15/11	09/19/11	09/19/11	
L54154-2	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	09/14/11	09/16/11	09/21/11	
L54154-2	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	09/14/11	09/20/11	09/20/11	
L54154-3	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	09/14/11	09/16/11	09/21/11	
L54154-3	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	09/14/11	09/20/11	09/20/11	
WG117545-1	MB		CVTOC	BLANK WTR		09/19/11	09/19/11	MB1 09/19/11
WG117545-2	LCS		CVTOC	BLANK WTR		09/19/11	09/19/11	LEVEL1
WG117545-3	SB		CVTOC	BLANK WTR		09/19/11	09/19/11	WG117545-1
WG117545-4	LD		CVTOC	GRND WTR		09/19/11	09/19/11	L54073-5
WG117545-5	MS		CVTOC	GRND WTR		09/19/11	09/19/11	L54075-1
WG117545-6	LD		CVTOC	FRESH WTR		09/19/11	09/19/11	L54076-1
WG117545-7	LD		CVTOC	FRESH WTR		09/19/11	09/19/11	L54149-2
WG117545-8	MS		CVTOC	FRESH WTR		09/20/11	09/20/11	L54147-1
WG117545-9	MB		CVTOC	BLANK WTR		09/20/11	09/20/11	MB1 09/20/11
WG117545-10	LCS		CVTOC	BLANK WTR		09/20/11	09/20/11	LEVEL1
WG117545-11	MS		CVTOC	SEWER WTR		09/20/11	09/20/11	L54154-2
WG117545-12	SB		CVTOC	BLANK WTR		09/20/11	09/20/11	WG117545-9
WG117545-13	LD		CVTOC	FRESH WTR		09/20/11	09/20/11	L54020-1
WG117545-14	MS		CVTOC	FRESH WTR		09/20/11	09/20/11	L54020-3
WG117545-15	LD		CVTOC	SALT WTR		09/20/11	09/20/11	L54021-1
WG117545-16	MS		CVTOC	SALT WTR		09/20/11	09/20/11	L54021-3
WG117545-17	MB		CVDOC	BLANK WTR		09/16/11	09/20/11	MB1 09/16/11
WG117545-18	LCS		CVDOC	BLANK WTR		09/20/11	09/20/11	LEVEL1
WG117545-19	SB		CVDOC	BLANK WTR		09/16/11	09/20/11	WG117545-17
WG117545-20	MB		CVDOC	BLANK WTR		09/16/11	09/21/11	MB2 09/16/11
WG117545-21	LD		CVDOC	FRESH WTR		09/16/11	09/21/11	L54149-1
WG117545-22	MS		CVDOC	FRESH WTR		09/16/11	09/21/11	L54149-2
WG117545-23	MB		CVDOC	BLANK WTR		09/15/11	09/21/11	MB2 09/15/11
WG117545-24	MB		CVDOC	BLANK WTR		09/20/11	09/21/11	MB1 09/20/11

WG117545-25	LCS		CVDOC	BLANK WTR		09/21/11	09/21/11	LEVEL1
WG117545-26	SB		CVDOC	BLANK WTR		09/20/11	09/21/11	WG117545-24
WG117545-27	LD		CVDOC	FRESH WTR		09/20/11	09/21/11	L54020-1
WG117545-28	MS		CVDOC	FRESH WTR		09/20/11	09/21/11	L54020-3
WG117545-29	LD		CVDOC	SALT WTR		09/20/11	09/21/11	L54021-1
WG117545-30	MS		CVDOC	SALT WTR		09/20/11	09/21/11	L54021-3
WG117545-31	LD		CVTOC	SEWER WTR		09/20/11	09/20/11	L54154-2
WG117545-32	LD		CVDOC	SEWER WTR		09/16/11	09/21/11	L54154-3
WG117545-33	MS		CVDOC	SEWER WTR		09/16/11	09/21/11	L54154-3

WG117384 - Total Organic Carbon

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L53667-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53667-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53667-3	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53667-4	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53667-5	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53667-6	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	FRESH WTR	09/06/11	09/08/11	09/08/11	
L53821-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	09/01/11	09/08/11	09/08/11	
L53821-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	09/01/11	09/08/11	09/08/11	
L53936-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L53937-1	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarterly	CVTOC	FRESH WTR	08/31/11	09/08/11	09/08/11	
L54036-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	BLANK WTR	08/29/11	09/08/11	09/08/11	
L54037-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/01/11	09/08/11	09/08/11	
L54037-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L54040-1	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	09/07/11	09/08/11	09/08/11	
L54040-2	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	09/07/11	09/08/11	09/08/11	
L54040-3	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	09/07/11	09/09/11	09/09/11	
L54040-4	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	09/07/11	09/09/11	09/09/11	
L54043-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	09/08/11	09/09/11	09/09/11	
L54043-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	09/08/11	09/09/11	09/09/11	
L54043-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	09/08/11	09/09/11	09/09/11	
L54053-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/01/11	09/08/11	09/08/11	
L54054-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L54054-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L54054-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L54054-5	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/02/11	09/08/11	09/08/11	
L54055-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/06/11	09/08/11	09/08/11	
L54055-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/06/11	09/08/11	09/08/11	
L54059-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	09/07/11	09/09/11	09/09/11	

L54060-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	09/07/11	09/09/11	09/09/11	
L54060-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	09/07/11	09/12/11	09/12/11	
L54060-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	09/07/11	09/09/11	09/09/11	
L54060-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	09/07/11	09/09/11	09/09/11	
L54062-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/08/11	09/09/11	09/09/11	
L54063-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/09/11	09/13/11	09/13/11	
L54063-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/09/11	09/13/11	09/13/11	
L54065-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/12/11	09/13/11	09/13/11	
L54065-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/12/11	09/13/11	09/13/11	
L54072-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/12/11	09/13/11	09/13/11	
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/06/11	09/09/11	09/09/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/06/11	09/09/11	09/09/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/06/11	09/09/11	09/09/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/07/11	09/09/11	09/09/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/07/11	09/12/11	09/12/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/07/11	09/12/11	09/12/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/07/11	09/12/11	09/12/11	
WG117384-1	MB		CVTOC	BLANK WTR		09/08/11	09/08/11	MB1 110908
WG117384-2	LCS		CVTOC	BLANK WTR		09/08/11	09/08/11	LEVEL1
WG117384-3	SB		CVTOC	BLANK WTR		09/08/11	09/08/11	WG117384-1
WG117384-4	LD		CVTOC	GRND WTR		09/08/11	09/08/11	L54037-3
WG117384-5	MS		CVTOC	GRND WTR		09/08/11	09/08/11	L54054-1
WG117384-6	LD		CVTOC	FRESH WTR		09/08/11	09/08/11	L53937-1
WG117384-7	LD		CVTOC	FRESH WTR		09/08/11	09/08/11	L53667-2
WG117384-8	MS		CVTOC	FRESH WTR		09/08/11	09/08/11	L53667-4
WG117384-9	MB		CVTOC	BLANK WTR		09/08/11	09/08/11	MB2 110908
WG117384-10	LCS		CVTOC	BLANK WTR		09/08/11	09/08/11	LEVEL1
WG117384-11	LD		CVTOC	FRESH WTR		09/09/11	09/09/11	L54040-2
WG117384-12	MS		CVTOC	FRESH WTR		09/09/11	09/09/11	L54040-4
WG117384-13	LD		CVTOC	FRESH WTR		09/09/11	09/09/11	L54090-2
WG117384-14	MS		CVTOC	FRESH WTR		09/09/11	09/09/11	L54090-3
WG117384-15	LD		CVTOC	LEACHATE		09/09/11	09/09/11	L54060-4
WG117384-16	MB		CVTOC	BLANK WTR		09/09/11	09/09/11	MB1 110909
WG117384-17	LCS		CVTOC	BLANK WTR		09/09/11	09/09/11	LEVEL1
WG117384-18	SB		CVTOC	BLANK WTR		09/09/11	09/09/11	WG117384-16
WG117384-19	LD		CVTOC	FRESH WTR		09/09/11	09/09/11	L54043-1
WG117384-20	MS		CVTOC	FRESH WTR		09/09/11	09/09/11	L54043-4
WG117384-21	MB		CVTOC	BLANK WTR		09/12/11	09/12/11	MB1 110912
WG117384-22	LCS		CVTOC	BLANK WTR		09/12/11	09/12/11	LEVEL1
WG117384-23	SB		CVTOC	BLANK WTR		09/12/11	09/12/11	WG117384-21
WG117384-24	LD		CVTOC	FRESH WTR		09/12/11	09/12/11	L54117-2

WG117384-25	MS		CVTOC	FRESH WTR		09/12/11	09/12/11	L54117-3
WG117384-26	MS		CVTOC	LEACHATE		09/12/11	09/12/11	L54060-3
WG117384-27	LD		CVTOC	GRND WTR		09/13/11	09/13/11	L54072-1
WG117384-28	MS		CVTOC	GRND WTR		09/13/11	09/13/11	L54065-1

WG117300 - Total Suspended Solids

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L54038-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-3	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-4	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-5	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-6	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-7	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-8	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-9	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-10	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-11	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54038-12	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-1	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-2	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-3	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-4	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-5	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-6	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-7	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54039-8	421240A	STREAMS MONITOR (surf wtr)	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54040-1	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	09/07/11	09/08/11	09/09/11	
L54040-2	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	09/07/11	09/08/11	09/09/11	
L54040-3	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	09/07/11	09/08/11	09/09/11	
L54040-4	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	09/07/11	09/08/11	09/09/11	
L54043-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	09/08/11	09/08/11	09/09/11	
L54043-3	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	09/08/11	09/08/11	09/09/11	
L54043-4	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	09/08/11	09/08/11	09/09/11	
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/06/11	09/08/11	09/09/11	
WG117300-1	MB		CVTSS	BLANK WTR		09/08/11	09/09/11	MB1 110908
WG117300-2	LCS		CVTSS	BLANK WTR		09/08/11	09/09/11	LEVEL1
WG117300-3	LD		CVTSS	FRESH WTR		09/08/11	09/09/11	L54038-6

WG117300-4	MB		CVTSS	BLANK WTR		09/08/11	09/09/11	MB2 110908
WG117300-5	LCS		CVTSS	BLANK WTR		09/08/11	09/09/11	LEVEL1
WG117300-6	LD		CVTSS	FRESH WTR		09/08/11	09/09/11	L54040-3
WG117300-7	LD		CVTSS	FRESH WTR		09/08/11	09/09/11	L54090-2
WG117300-8	LD		CVTSS	FRESH WTR		09/08/11	09/09/11	L54043-4

WG117350 - Total Suspended Solids

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L54062-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/08/11	09/09/11	09/12/11	
L54063-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/09/11	09/09/11	09/12/11	
L54063-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/09/11	09/09/11	09/12/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/07/11	09/09/11	09/12/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/07/11	09/09/11	09/12/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/07/11	09/09/11	09/12/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/07/11	09/09/11	09/12/11	
WG117350-1	MB		CVTSS	BLANK WTR		09/09/11	09/12/11	MB1 110909
WG117350-2	LCS		CVTSS	BLANK WTR		09/09/11	09/12/11	LEVEL1
WG117350-3	LD		CVTSS	FRESH WTR		09/09/11	09/12/11	L54117-3
WG117350-4	LD		CVTSS	GRND WTR		09/09/11	09/12/11	L54063-4

WG117427 - Total Suspended Solids

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L54063-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/13/11	09/16/11	09/19/11	
L54065-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/12/11	09/16/11	09/19/11	
L54065-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/12/11	09/16/11	09/19/11	
L54072-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/12/11	09/16/11	09/19/11	
L54073-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/15/11	09/16/11	09/19/11	
L54073-3	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/15/11	09/16/11	09/19/11	
L54075-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/14/11	09/16/11	09/19/11	
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/12/11	09/16/11	09/19/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/12/11	09/16/11	09/19/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/12/11	09/16/11	09/19/11	
L54126-1	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	09/13/11	09/16/11	09/19/11	
L54126-3	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	09/13/11	09/16/11	09/19/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/11	09/16/11	09/19/11	
L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/11	09/16/11	09/19/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/11	09/16/11	09/19/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/11	09/16/11	09/19/11	
L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/14/11	09/16/11	09/19/11	

L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/14/11	09/16/11	09/19/11	
L54154-2	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	09/14/11	09/16/11	09/19/11	
L54154-3	423589-320-4	CSO Basin Study	CVTSS	SEWER WTR	09/14/11	09/16/11	09/19/11	
WG117427-1	MB		CVTSS	BLANK WTR		09/16/11	09/19/11	MB1 110916
WG117427-2	LCS		CVTSS	BLANK WTR		09/16/11	09/19/11	LEVEL1
WG117427-3	LD		CVTSS	GRND WTR		09/16/11	09/19/11	L54072-1
WG117427-4	LD		CVTSS	FRESH WTR		09/16/11	09/19/11	L54125-3
WG117427-5	LD		CVTSS	SEWER WTR		09/16/11	09/19/11	L54126-3

WG117462 - Total Suspended Solids

Sample	Project	Project Description	List Type	Matrix	Coll. Date	Prep. Date	Anal. Date	Comments
L54121-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/12/11	09/19/11	09/20/11	
L54122-2	421161	IW SURCHARGE	CVTSS	IW WTR	09/12/11	09/19/11	09/20/11	
L54123-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/14/11	09/19/11	09/20/11	
L54127-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/13/11	09/19/11	09/20/11	
L54128-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/13/11	09/19/11	09/20/11	
L54129-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/14/11	09/19/11	09/20/11	
L54130-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/14/11	09/19/11	09/20/11	
L54131-2	421161	IW SURCHARGE	CVTSS	IW WTR	09/14/11	09/19/11	09/20/11	
L54132-1	421161	IW SURCHARGE	CVTSS	IW WTR	09/12/11	09/19/11	09/20/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/15/11	09/19/11	09/20/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/15/11	09/19/11	09/20/11	
L54160-4	421161	IW SURCHARGE	CVTSS	IW WTR	09/13/11	09/19/11	09/20/11	
L54160-5	421161	IW SURCHARGE	CVTSS	IW WTR	09/14/11	09/19/11	09/20/11	
WG117462-1	MB		CVTSS	BLANK WTR		09/19/11	09/20/11	MB1 110919
WG117462-2	LCS		CVTSS	BLANK WTR		09/19/11	09/20/11	LEVEL1
WG117462-3	LD		CVTSS	IW WTR		09/19/11	09/20/11	L54122-2
WG117462-4	LD		CVTSS	FRESH WTR		09/19/11	09/20/11	L54149-1

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Workgroup WG117453

Method Blank
MB:WG117453-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117453-2 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project:

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

Spike Blank
SB:WG117453-3 MB:WG117453-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.94	99		80--120

Laboratory Duplicate
LD:WG117453-4 L53667-2 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.38	3.18	6		0--20

Matrix Spike
MS:WG117453-5 L53667-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:422027

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.57	10	13	104		75--125

Method Blank
MB:WG117453-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project:

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Matrix Spike
MS:WG117453-7 L54036-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	4.62	10	15.4	108		75--125

Method Blank
MB:WG117453-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

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Laboratory Duplicate
LD:WG117453-9 L54040-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.07	3.15	3		0--20

Matrix Spike
MS:WG117453-10 L54090-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	18.4	10	28.4	100		75--125

Method Blank
MB:WG117453-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117453-12 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.9	109		85--115

Laboratory Duplicate
LD:WG117453-13 L54117-2 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	4.65	4.49	3		0--20

Matrix Spike
MS:WG117453-14 L54117-4 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	6.59	10	17	105		75--125

Method Blank
MB:WG117453-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117453-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.8	108		85--115

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Method Blank

MB:WG117453-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117453-18 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

Spike Blank

SB:WG117453-19 MB:WG117453-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

Laboratory Duplicate

LD:WG117453-20 L54125-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	8.2	8.45	3		0--20

Matrix Spike

MS:WG117453-21 L54125-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.19	10	13.6	105		75--125

Method Blank

MB:WG117453-22 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117453-23 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.8	108		85--115

Spike Blank

SB:WG117453-24 MB:WG117453-22 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	11	110		80--120

Laboratory Duplicate

LD:WG117453-25 L54125-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	7.74	7.86	2		0--20

Matrix Spike

MS:WG117453-26 L54125-4 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.1	10	13.2	101		75--125

Workgroup WG117545

Method Blank

MB:WG117545-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117545-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.7	107		85--115

Spike Blank

SB:WG117545-3 MB:WG117545-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	20	20.7	103		80--120

Laboratory Duplicate

LD:WG117545-4 L54073-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	16.4	15.7	5		0--20

Matrix Spike

MS:WG117545-5 L54075-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	15	10	24.5	95		75--125

Laboratory Duplicate

LD:WG117545-6 L54076-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	11.4	11.5	1		0--20

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Laboratory Duplicate

LD:WG117545-7 L54149-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.57	4.69	3		0--20

Matrix Spike

MS:WG117545-8 L54147-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.82	10	12.1	102		75--125

Method Blank

MB:WG117545-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117545-10 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.8	108		85--115

Matrix Spike

MS:WG117545-11 L54154-2 Matrix: SEWER WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	50	100	mg/L	463	10	1450	98		75--125

Spike Blank

SB:WG117545-12 MB:WG117545-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

Laboratory Duplicate

LD:WG117545-13 L54020-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.07	1.81	13		0--20

Matrix Spike

MS:WG117545-14 L54020-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.18	10	12.4	102		75--125

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Laboratory Duplicate
LD:WG117545-15 L54021-1 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.86	1.78	4		0--20

Matrix Spike
MS:WG117545-16 L54021-3 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.02	10	11.9	98		75--125

Method Blank
MB:WG117545-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117545-18 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

Spike Blank
SB:WG117545-19 MB:WG117545-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

Method Blank
MB:WG117545-20 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Duplicate
LD:WG117545-21 L54149-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.09	2.43	15		0--20

Matrix Spike
MS:WG117545-22 L54149-2 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.72	10	14	102		75--125

LIMSView QC Report for Green River Baseflow Samples - Data Validation for Conventionals

Method Blank
MB:WG117545-23 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Method Blank
MB:WG117545-24 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117545-25 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.5	105		85--115

Spike Blank
SB:WG117545-26 MB:WG117545-24 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.9	109		80--120

Laboratory Duplicate
LD:WG117545-27 L54020-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.93	1.91	1		0--20

Matrix Spike
MS:WG117545-28 L54020-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.95	10	12	101		75--125

Laboratory Duplicate
LD:WG117545-29 L54021-1 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.91	1.73	10		0--20

Matrix Spike
MS:WG117545-30 L54021-3 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.67	10	11.5	99		75--125

Laboratory Duplicate

LD:WG117545-31 L54154-2 Matrix: SEWER WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	50	100	mg/L	463	481	4		0--20

Laboratory Duplicate
LD:WG117545-32 L54154-3 Matrix: SEWER WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	5	10	mg/L	93.8	95.3	2		0--20

Matrix Spike
MS:WG117545-33 L54154-3 Matrix: SEWER WTR Listtype:CVDOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	5	10	mg/L	93.8	10	198	104		75--125

Workgroup WG117384

Method Blank
MB:WG117384-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117384-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.5	105		85--115

Spike Blank
SB:WG117384-3 MB:WG117384-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.5	105		80--120

Laboratory Duplicate
LD:WG117384-4 L54037-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.76	1.78	1		0--20

Matrix Spike
MS:WG117384-5 L54054-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.81	10	11.1	103		75--125

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Laboratory Duplicate
LD:WG117384-6 L53937-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.45	1.6	10		0--20

Laboratory Duplicate
LD:WG117384-7 L53667-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.54	3.56	1		0--20

Matrix Spike
MS:WG117384-8 L53667-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.53	10	12.6	100		75--125

Method Blank
MB:WG117384-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117384-10 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

Laboratory Duplicate
LD:WG117384-11 L54040-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.31	3.92	9		0--20

Matrix Spike
MS:WG117384-12 L54040-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.35	10	12.8	95		75--125

Laboratory Duplicate
LD:WG117384-13 L54090-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	16.5	17	3		0--20

LIMSView QC Report for Green River Baseflow Samples - Data Validation for Conventionals

Matrix Spike
MS:WG117384-14 L54090-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	16.8	10	26.9	101		75--125

Laboratory Duplicate
LD:WG117384-15 L54060-4 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	15	30	mg/L	572	534	7		0--20

Method Blank
MB:WG117384-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

Laboratory Control Samples
LCS:WG117384-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.7	107		85--115

Spike Blank
SB:WG117384-18 MB:WG117384-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.1	101		80--120

Laboratory Duplicate
LD:WG117384-19 L54043-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.34	6.13	3		0--20

Matrix Spike
MS:WG117384-20 L54043-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.99	10	13.2	82		75--125

Method Blank
MB:WG117384-21 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

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Laboratory Control Sample
LCS:WG117384-22 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.5	105		85--115

Spike Blank
SB:WG117384-23 MB:WG117384-21 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.4	104		80--120

Laboratory Duplicate
LD:WG117384-24 L54117-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.43	4.01	10		0--20

Matrix Spike
MS:WG117384-25 L54117-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	8.34	10	18.4	100		75--125

Matrix Spike
MS:WG117384-26 L54060-3 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	50	100	mg/L	1800	10	2820	102		75--125

Laboratory Duplicate
LD:WG117384-27 L54072-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	11.9	11.8	1		0--20

Matrix Spike
MS:WG117384-28 L54065-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	15	10	24.8	98		75--125

Workgroup WG117300

Method Blank
MB:WG117300-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LIMSView QC Report for Green River Baseflow Samples - Data Validation for Conventionals

Laboratory Control Sample

LCS:WG117300-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	92	92		80--120

Laboratory Duplicate

LD:WG117300-3 L54038-6 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3	3	0		0--25

Method Blank

MB:WG117300-4 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117300-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

Laboratory Duplicate

LD:WG117300-6 L54040-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	4	3.4	16		0--25

Laboratory Duplicate

LD:WG117300-7 L54090-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2.6	2.6	0		0--25

Laboratory Duplicate

LD:WG117300-8 L54043-4 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.1	2.2	mg/L	47.3	58.4	21		0--25

Workgroup WG117350

Method Blank

MB:WG117350-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117350-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	92	92		80--120

Laboratory Duplicate
LD:WG117350-3 L54117-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.1	2.2	mg/L	3.78	3.11	19		0--25

Laboratory Duplicate
LD:WG117350-4 L54063-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

Workgroup WG117427

Method Blank
MB:WG117427-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

Laboratory Control Sample
LCS:WG117427-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	112	112		80--120

Laboratory Duplicate
LD:WG117427-3 L54072-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	23	23.6	3		0--25

Laboratory Duplicate
LD:WG117427-4 L54125-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	4.4	4.6	4		0--25

Laboratory Duplicate
LD:WG117427-5 L54126-3 Matrix: SEWER WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	20	40	mg/L	260	296	13		0--25

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Workgroup WG117462

Method Blank

MB:WG117462-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

Laboratory Control Sample

LCS:WG117462-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	115	115		80--120

Laboratory Duplicate

LD:WG117462-3 L54122-2 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	15	29	mg/L	226	150	41	*	0--25

Laboratory Duplicate

LD:WG117462-4 L54149-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.1	2.2	mg/L	3.96	4.18	5		0--25

LIMSView Batch Report for Green River Bulk Water Storm Samples - Data Validation for TOC and DOC (#1)

WG118615

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54191-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-3	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-3	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-4	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-4	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-5	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-5	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54191-6	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	11/17/11	11/17/11	11/17/11	
L54379-1	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVDOC	BLANK WTR	11/16/11	11/17/11	11/18/11	
L54379-1	421185	WP INPLANT 3 Day INTENSIVE STUDY	CVTOC	BLANK WTR	11/16/11	11/17/11	11/17/11	
L54523-1	421195-470	Miller Creek DOC Study	CVDOC	STORM WTR	11/16/11	11/17/11	11/17/11	
L54523-2	421195-470	Miller Creek DOC Study	CVDOC	STORM WTR	11/16/11	11/17/11	11/17/11	
L54557-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/10/11	11/17/11	11/17/11	
L54573-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/16/11	11/16/11	11/16/11	
L54574-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/15/11	11/16/11	11/16/11	
L54574-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/10/11	11/16/11	11/16/11	
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/14/11	11/16/11	11/16/11	
L54576-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/14/11	11/16/11	11/16/11	
L54576-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/10/11	11/16/11	11/16/11	
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/14/11	11/17/11	11/17/11	
L54578-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/15/11	11/16/11	11/16/11	
L54579-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/15/11	11/16/11	11/16/11	
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	11/16/11	11/17/11	11/17/11	
L54604-2	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	11/16/11	11/17/11	11/17/11	
L54604-3	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	11/16/11	11/17/11	11/17/11	
L54604-4	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	11/16/11	11/17/11	11/17/11	
L54604-5	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	11/16/11	11/17/11	11/17/11	
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	11/16/11	11/18/11	11/18/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	11/16/11	11/18/11	11/18/11	

WG118615-1	MB		CVTOC	BLANK WTR		11/16/11	11/16/11	MB1 11/16/11
WG118615-2	LCS		CVTOC	BLANK WTR		11/16/11	11/16/11	LEVEL1
WG118615-3	SB		CVTOC	BLANK WTR		11/16/11	11/16/11	WG118615-1
WG118615-4	MS		CVTOC	GRND WTR		11/16/11	11/16/11	L54573-1
WG118615-5	LD		CVTOC	FRESH WTR		11/17/11	11/17/11	L54604-2
WG118615-6	MS		CVTOC	FRESH WTR		11/17/11	11/17/11	L54604-4
WG118615-7	LCS		CVTOC	BLANK WTR		11/17/11	11/17/11	LEVEL1
WG118615-8	LD		CVTOC	GRND WTR		11/17/11	11/17/11	L54578-1
WG118615-9	MB		CVTOC	BLANK WTR		11/17/11	11/17/11	MB1 11/17/11
WG118615-10	MB		CVDOC	BLANK WTR		11/17/11	11/17/11	MB1 111117A
WG118615-11	LCS		CVDOC	BLANK WTR		11/17/11	11/17/11	LEVEL1
WG118615-12	SB		CVDOC	BLANK WTR		11/17/11	11/17/11	WG118615-10
WG118615-13	LD		CVDOC	STORM WTR		11/17/11	11/17/11	L54523-1
WG118615-14	MS		CVDOC	STORM WTR		11/17/11	11/17/11	L54523-2
WG118615-15	MB		CVDOC	BLANK WTR		11/17/11	11/17/11	MB2 111117
WG118615-16	MB		CVTOC	BLANK WTR		11/17/11	11/17/11	MB2 111117
WG118615-17	LCS		CVTOC	BLANK WTR		11/17/11	11/17/11	LEVEL1
WG118615-18	SB		CVTOC	BLANK WTR		11/17/11	11/17/11	WG118615-16
WG118615-19	LD		CVTOC	STORM WTR		11/17/11	11/17/11	L54191-2
WG118615-20	MS		CVTOC	STORM WTR		11/17/11	11/17/11	L54191-3
WG118615-21	MB		CVTOC	BLANK WTR		11/18/11	11/18/11	MB1 111118
WG118615-22	LCS		CVTOC	BLANK WTR		11/18/11	11/18/11	LEVEL1
WG118615-23	MB		CVDOC	BLANK WTR		11/18/11	11/18/11	MB1 111118
WG118615-24	LCS		CVDOC	BLANK WTR		11/18/11	11/18/11	LEVEL1

WG119562

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	01/31/12	02/02/12	02/02/12	
L54687-1	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	01/25/12	01/27/12	02/02/12	

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L54687-1	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	01/25/12	02/01/12	02/01/12	
L54687-2	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	01/25/12	01/27/12	02/01/12	
L54687-2	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	01/25/12	02/01/12	02/01/12	
L54687-3	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	01/25/12	01/27/12	02/01/12	
L54687-3	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	01/25/12	02/01/12	02/01/12	
L54924-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/26/12	02/01/12	02/01/12	
L54924-6	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/02/12	02/02/12	02/02/12	
L54928-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/26/12	02/01/12	02/01/12	
L54928-4	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/26/12	02/01/12	02/01/12	
L54928-6	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/31/12	02/01/12	02/01/12	
L54928-7	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-8	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-9	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-10	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54956-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/31/12	02/01/12	02/01/12	
L54958-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/30/12	02/01/12	02/01/12	
L54958-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/30/12	02/01/12	02/01/12	
L54958-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	02/01/12	02/02/12	02/02/12	
L54959-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/27/12	02/01/12	02/01/12	
L54959-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/27/12	02/01/12	02/01/12	
L54959-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/30/12	02/01/12	02/01/12	
L54960-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	01/26/12	02/01/12	02/01/12	
L54960-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	01/26/12	02/01/12	02/01/12	
L54961-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	01/27/12	02/01/12	02/01/12	
L54961-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	01/27/12	02/01/12	02/01/12	
L54961-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	01/27/12	02/01/12	02/01/12	
L54961-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	01/30/12	02/01/12	02/01/12	
L54963-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/01/12	02/02/12	02/02/12	
L54963-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/01/12	02/02/12	02/02/12	
L55020-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/02/12	02/02/12	02/02/12	
L55020-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/02/12	02/02/12	02/02/12	
L55020-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	02/02/12	02/02/12	02/02/12	
WG119562-1	MB		CVTOC	BLANK WTR		02/01/12	02/01/12	MB1 120131
WG119562-2	LCS		CVTOC	BLANK WTR		02/01/12	02/01/12	LEVEL1
WG119562-3	SB		CVTOC	BLANK WTR		02/01/12	02/01/12	WG119562-1
WG119562-4	MS		CVTOC	GRND WTR		02/01/12	02/01/12	L54956-6
WG119562-5	LD		CVTOC	FRESH WTR		02/01/12	02/01/12	L54928-4
WG119562-6	MS		CVTOC	FRESH WTR		02/01/12	02/01/12	L54928-6
WG119562-7	LD		CVTOC	STORM WTR		02/01/12	02/01/12	L54687-1
WG119562-8	MS		CVTOC	STORM WTR		02/01/12	02/01/12	L54687-3
WG119562-9	LD		CVTOC	GRND WTR		02/01/12	02/01/12	L54959-5

WG119562-10	MB		CVDOC	BLANK WTR		01/27/12	02/01/12	MB1 120127
WG119562-11	LCS		CVDOC	BLANK WTR		02/01/12	02/01/12	LEVEL1
WG119562-12	SB		CVDOC	BLANK WTR		01/27/12	02/01/12	WG119562-10
WG119562-13	MS		CVDOC	STORM WTR		01/27/12	02/01/12	L54687-3
WG119562-14	LCS		CVDOC	BLANK WTR		02/02/12	02/02/12	LEVEL1
WG119562-15	LD		CVDOC	STORM WTR		01/27/12	02/02/12	L54687-1
WG119562-16	MB		CVDOC	BLANK WTR		02/02/12	02/02/12	MB1 120202
WG119562-17	MB		CVTOC	BLANK WTR		02/02/12	02/02/12	MB1 120202
WG119562-18	LCS		CVTOC	BLANK WTR		02/02/12	02/02/12	LEVEL1
WG119562-19	MB		CVDOC	BLANK WTR		02/02/12	02/02/12	MB2 120202

WG119964

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54864-3	421422-CHGW-OS	SWD-CHGW-OS Cedar Hills Groundwater Off-Site	CVTOC	GRND WTR	02/29/12	03/01/12	03/01/12	
L55011-1	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	02/29/12	03/01/12	
L55011-1	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/01/12	03/01/12	
L55011-2	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	02/29/12	03/01/12	
L55011-2	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/01/12	03/01/12	
L55011-3	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	02/29/12	03/01/12	
L55011-3	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/01/12	03/01/12	
L55034-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55035-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55035-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55055-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	02/28/12	02/28/12	02/28/12	
L55057-4	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	02/29/12	03/01/12	03/01/12	
L55061-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55062-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	02/24/12	02/28/12	02/28/12	
L55062-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55062-4	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	02/27/12	02/28/12	02/28/12	
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	02/24/12	02/25/12	02/29/12	
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	02/24/12	02/28/12	02/28/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	02/24/12	02/25/12	02/29/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	02/24/12	02/28/12	02/28/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	02/24/12	02/25/12	02/29/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	02/24/12	02/29/12	02/29/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	02/24/12	02/25/12	02/29/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	02/24/12	02/29/12	02/29/12	
L55175-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	02/24/12	02/25/12	02/28/12	
L55175-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	02/24/12	02/29/12	02/29/12	
L55175-3	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	02/24/12	02/25/12	02/28/12	

L55175-3	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	02/24/12	02/29/12	02/29/12	
L55175-6	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	02/24/12	02/25/12	02/28/12	
L55175-6	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	02/24/12	02/29/12	02/29/12	
WG119964-1	MB		CVTOC	BLANK WTR		02/28/12	02/28/12	MB1 120228
WG119964-2	LCS		CVTOC	BLANK WTR		02/28/12	02/28/12	LEVEL1
WG119964-3	SB		CVTOC	BLANK WTR		02/28/12	02/28/12	WG119964-1
WG119964-4	LD		CVTOC	STORM WTR		02/28/12	02/28/12	L55077-1
WG119964-5	MS		CVTOC	STORM WTR		02/28/12	02/28/12	L55077-2
WG119964-6	LD		CVTOC	GRND WTR		02/28/12	02/28/12	L55035-1
WG119964-7	MS		CVTOC	GRND WTR		02/28/12	02/28/12	L55062-3
WG119964-8	MB		CVDOC	BLANK WTR		02/25/12	02/28/12	MB1 120225
WG119964-9	LCS		CVDOC	BLANK WTR		02/28/12	02/28/12	LEVEL1
WG119964-10	SB		CVDOC	BLANK WTR		02/25/12	02/28/12	WG119964-8
WG119964-11	MB		CVDOC	BLANK WTR		02/25/12	02/28/12	MB2 120225
WG119964-12	LD		CVDOC	STORM WTR		02/25/12	02/29/12	L55077-1
WG119964-13	MS		CVDOC	STORM WTR		02/25/12	02/29/12	L55077-2
WG119964-14	MB		CVTOC	BLANK WTR		02/29/12	02/29/12	MB1 120229
WG119964-15	LCS		CVTOC	BLANK WTR		02/29/12	02/29/12	LEVEL1
WG119964-16	MB		CVTOC	BLANK WTR		03/01/12	03/01/12	MB1 120301
WG119964-17	LCS		CVTOC	BLANK WTR		03/01/12	03/01/12	LEVEL1
WG119964-18	MB		CVDOC	BLANK WTR		02/29/12	03/01/12	MB1 120229
WG119964-19	LCS		CVDOC	BLANK WTR		03/01/12	03/01/12	LEVEL1

WG120092

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55035-4	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	03/01/12	03/07/12	03/07/12	
L55065-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	03/05/12	03/07/12	03/07/12	
L55065-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	03/05/12	03/07/12	03/07/12	
L55065-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/06/12	03/07/12	03/07/12	
L55065-5	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	03/02/12	03/07/12	03/07/12	
L55139-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	03/02/12	03/07/12	03/07/12	
L55139-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	03/02/12	03/07/12	03/07/12	
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/05/12	03/07/12	03/12/12	
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/05/12	03/07/12	03/12/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/05/12	03/07/12	03/12/12	
L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/05/12	03/13/12	03/13/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/05/12	03/07/12	03/12/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/05/12	03/08/12	03/08/12	

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L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/05/12	03/07/12	03/12/12	
L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/05/12	03/08/12	03/08/12	
L55186-1	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	03/02/12	03/12/12	
L55186-1	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/13/12	03/13/12	
L55186-2	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	03/02/12	03/12/12	
L55186-2	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/13/12	03/13/12	
L55186-3	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	02/29/12	03/02/12	03/12/12	
L55186-3	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	02/29/12	03/07/12	03/07/12	
L55198-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/06/12	03/07/12	03/07/12	
L55198-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/06/12	03/07/12	03/07/12	
L55198-5	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/06/12	03/07/12	03/07/12	
L55205-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/01/12	03/07/12	03/07/12	
L55205-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/01/12	03/07/12	03/07/12	
L55205-4	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/01/12	03/07/12	03/07/12	
L55210-1	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	03/06/12	03/06/12	03/12/12	
L55210-1	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	03/06/12	03/08/12	03/08/12	
L55210-2	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	03/06/12	03/06/12	03/12/12	
L55210-2	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	03/06/12	03/08/12	03/08/12	
L55210-3	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	03/06/12	03/06/12	03/13/12	
L55210-3	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	03/06/12	03/08/12	03/08/12	
L55210-4	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	03/06/12	03/06/12	03/13/12	
L55210-4	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	03/06/12	03/08/12	03/08/12	
L55214-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	03/02/12	03/07/12	03/07/12	
L55225-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	03/05/12	03/07/12	03/07/12	
L55225-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	03/05/12	03/07/12	03/07/12	
L55245-1	421422-CHSW-A5-TD	SWD-CHSW - A5 TD Cedar Hills Surface Area 5 Top Deck	CVTOC	FRESH WTR	03/05/12	03/07/12	03/07/12	
WG120092-1	MB		CVTOC	BLANK WTR		03/07/12	03/07/12	MB1 120307
WG120092-2	LCS		CVTOC	BLANK WTR		03/07/12	03/07/12	LEVEL1
WG120092-3	SB		CVTOC	BLANK WTR		03/07/12	03/07/12	WG120092-1
WG120092-4	LD		CVTOC	GRND WTR		03/07/12	03/07/12	L55139-1
WG120092-5	MS		CVTOC	GRND WTR		03/07/12	03/07/12	L55214-1
WG120092-6	MS		CVTOC	STORM WTR		03/07/12	03/07/12	L55186-3
WG120092-7	MB		CVTOC	BLANK WTR		03/07/12	03/07/12	MB2 120307
WG120092-8	LCS		CVTOC	BLANK WTR		03/07/12	03/07/12	LEVEL1
WG120092-9	LD		CVTOC	FRESH WTR		03/08/12	03/08/12	L55210-2
WG120092-10	MS		CVTOC	FRESH WTR		03/08/12	03/08/12	L55210-4
WG120092-11	MB		CVDOC	BLANK WTR		03/02/12	03/12/12	MB1 120302
WG120092-12	LCS		CVDOC	BLANK WTR		03/12/12	03/12/12	LEVEL1
WG120092-13	MB		CVDOC	BLANK WTR		03/07/12	03/12/12	MB1 120307
WG120092-14	SB		CVDOC	BLANK WTR		03/07/12	03/12/12	WG120092-13
WG120092-15	LD		CVDOC	STORM WTR		03/07/12	03/12/12	L55177-1

WG120092-16	MS		CVDOC	STORM WTR		03/07/12	03/12/12	L55177-2
WG120092-17	MB		CVDOC	BLANK WTR		03/06/12	03/12/12	MB1 120309
WG120092-18	LD		CVDOC	FRESH WTR		03/06/12	03/13/12	L55210-2
WG120092-19	MS		CVDOC	FRESH WTR		03/06/12	03/13/12	L55210-4
WG120092-20	MB		CVTOC	BLANK WTR		03/13/12	03/13/12	MB1 120312
WG120092-21	LCS		CVTOC	BLANK WTR		03/13/12	03/13/12	LEVEL1
WG120092-22	LD		CVTOC	STORM WTR		03/13/12	03/13/12	L55186-1

WG120155

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54928-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55060-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/14/12	03/14/12	03/14/12	
L55060-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/13/12	03/13/12	
L55060-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/13/12	03/13/12	
L55149-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	03/13/12	03/14/12	03/14/12	
L55149-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	03/13/12	03/14/12	03/14/12	
L55198-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/14/12	03/14/12	
L55216-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	03/07/12	03/14/12	03/14/12	
L55217-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	03/07/12	03/14/12	03/14/12	
L55217-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	03/07/12	03/14/12	03/14/12	
L55217-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	03/07/12	03/14/12	03/14/12	
L55217-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	03/07/12	03/14/12	03/14/12	
L55219-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/08/12	03/14/12	03/14/12	
L55220-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/09/12	03/14/12	03/14/12	
L55220-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/09/12	03/14/12	03/14/12	
L55220-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/09/12	03/14/12	03/14/12	
L55223-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/12/12	03/14/12	03/14/12	
L55224-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-2	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-3	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-4	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-5	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-6	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55231-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/12/12	03/12/12	03/13/12	
L55231-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/12/12	03/15/12	03/15/12	
L55231-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/12/12	03/12/12	03/13/12	
L55231-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/12/12	03/15/12	03/15/12	
L55231-5	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/12/12	03/12/12	03/13/12	

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L55231-5	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/12/12	03/15/12	03/15/12	
L55231-6	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/12/12	03/12/12	03/13/12	
L55231-6	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/12/12	03/15/12	03/15/12	
L55231-7	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/12/12	03/13/12	03/13/12	
L55231-7	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/12/12	03/15/12	03/15/12	
L55235-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-2	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-3	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-4	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-5	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-6	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/13/12	03/14/12	03/14/12	
L55235-7	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/14/12	03/14/12	03/14/12	
L55235-9	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTOC	FRESH WTR	03/14/12	03/14/12	03/14/12	
L55236-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/14/12	03/14/12	03/14/12	
L55239-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/14/12	03/14/12	03/14/12	
L55239-3	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/14/12	03/14/12	03/14/12	
L55239-4	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/14/12	03/14/12	03/14/12	
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/10/12	03/12/12	03/13/12	
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/10/12	03/15/12	03/15/12	
L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/10/12	03/12/12	03/13/12	
L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/10/12	03/15/12	03/15/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/10/12	03/12/12	03/13/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/10/12	03/15/12	03/15/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/10/12	03/12/12	03/13/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/10/12	03/15/12	03/15/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/10/12	03/12/12	03/13/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/10/12	03/15/12	03/15/12	
WG120155-1	MB		CVDOC	BLANK WTR		03/12/12	03/13/12	MB1 120312
WG120155-2	LCS		CVDOC	BLANK WTR		03/13/12	03/13/12	LEVEL1
WG120155-3	LD		CVDOC	STORM WTR		03/12/12	03/13/12	L55283-4
WG120155-4	MB		CVDOC	BLANK WTR		03/12/12	03/13/12	MB2 120312
WG120155-5	SB		CVDOC	BLANK WTR		03/12/12	03/13/12	WG120155-4
WG120155-6	MS		CVDOC	STORM WTR		03/12/12	03/13/12	L55231-5
WG120155-7	MB		CVDOC	BLANK WTR		03/13/12	03/13/12	MB1 120313
WG120155-8	MB		CVTOC	BLANK WTR		03/13/12	03/13/12	MB1 120313
WG120155-9	LCS		CVTOC	BLANK WTR		03/13/12	03/13/12	LEVEL1
WG120155-10	SB		CVTOC	BLANK WTR		03/13/12	03/13/12	WG120155-8
WG120155-11	LD		CVTOC	FRESH WTR		03/13/12	03/13/12	L55224-2
WG120155-12	MS		CVTOC	FRESH WTR		03/13/12	03/13/12	L55224-5
WG120155-13	LD		CVTOC	GRND WTR		03/13/12	03/13/12	L55219-1
WG120155-14	MS		CVTOC	GRND WTR		03/14/12	03/14/12	L55219-4

WG120155-15	MB	CVTOC	BLANK WTR	03/14/12	03/14/12	MB2 120313
WG120155-16	LCS	CVTOC	BLANK WTR	03/14/12	03/14/12	LEVEL1
WG120155-17	MB	CVTOC	BLANK WTR	03/14/12	03/14/12	MB1 120314
WG120155-18	LCS	CVTOC	BLANK WTR	03/14/12	03/14/12	LEVEL1
WG120155-19	SB	CVTOC	BLANK WTR	03/14/12	03/14/12	WG120155-17
WG120155-20	LD	CVTOC	GRND WTR	03/14/12	03/14/12	L55239-3
WG120155-21	MS	CVTOC	GRND WTR	03/14/12	03/14/12	L55239-4
WG120155-22	LD	CVTOC	LEACHATE	03/14/12	03/14/12	L55217-1
WG120155-23	MS	CVTOC	LEACHATE	03/14/12	03/14/12	L55217-3
WG120155-24	MB	CVTOC	BLANK WTR	03/15/12	03/15/12	MB2 120314
WG120155-25	LCS	CVTOC	BLANK WTR	03/15/12	03/15/12	LEVEL1
WG120155-26	LD	CVTOC	STORM WTR	03/15/12	03/15/12	L55231-5
WG120155-27	MS	CVTOC	STORM WTR	03/15/12	03/15/12	L55283-1

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WG118615

MB:WG118615-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG118615-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

SB:WG118615-3 MB:WG118615-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.71	97		80--120

MS:WG118615-4 L54573-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.64	10	10.8	102		75--125

LD:WG118615-5 L54604-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.43	4.24	4		0--20

MS:WG118615-6 L54604-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.79	10	15.5	97		75--125

LCS:WG118615-7 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.6	106		85--115

LD:WG118615-8 L54578-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.92	0.89			0--20

MB:WG118615-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

MB:WG118615-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG118615-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	10.2	102		85--115

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SB:WG118615-12 MB:WG118615-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	10	9.97	100		80--120

LD:WG118615-13 L54523-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421195-470 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	6.27	6.64	6		0--20

MS:WG118615-14 L54523-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:421195-470 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	6.66	10	16.3	97		75--125

MB:WG118615-15 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

MB:WG118615-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG118615-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

SB:WG118615-18 MB:WG118615-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.94	99		80--120

LD:WG118615-19 L54191-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	7.75	7.88	2		0--20

MS:WG118615-20 L54191-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:422027 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.51	10	16.2	97		75--125

MB:WG118615-21 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG118615-22 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.8	108		85--115

MB:WG118615-23 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG118615-24 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	10.4	104		85--115

WG119562

MB:WG119562-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG119562-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.84	98		85--115

SB:WG119562-3 MB:WG119562-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.24	92		80--120

MS:WG119562-4 L54956-6 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.97	10	16.1	102		75--125

LD:WG119562-5 L54928-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.6	3.53	2		0--20

MS:WG119562-6 L54928-6 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.13	10	14.3	102		75--125

LD:WG119562-7 L54687-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	68.2	65.3	4		0--20

MS:WG119562-8 L54687-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	17	10	78.3	123		75--125

LD:WG119562-9 L54959-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.22	1.01	19		0--20

MB:WG119562-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG119562-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	9.97	100		85--115

SB:WG119562-12 MB:WG119562-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	10	10.3	103		80--120

MS:WG119562-13 L54687-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	7.05	10	16.8	97		75--125

LCS:WG119562-14 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	9.85	99		85--115

LD:WG119562-15 L54687-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	1	2	mg/L	47.9	47.3	1		0--20

MB:WG119562-16 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

MB:WG119562-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG119562-18 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.91	99		85--115

MB:WG119562-19 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

WG119964

MB:WG119964-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

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LCS:WG119964-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.93	99		85--115

SB:WG119964-3 MB:WG119964-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.1	101		80--120

LD:WG119964-4 L55077-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	7.8	8.06	3		0--20

MS:WG119964-5 L55077-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.19	10	15.3	101		75--125

LD:WG119964-6 L55035-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.1	1	10		0--20

MS:WG119964-7 L55062-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HOGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.76	10	11.2	104		75--125

MB:WG119964-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG119964-9 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	9.54	95		85--115

SB:WG119964-10 MB:WG119964-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	10	10.1	101		80--120

MB:WG119964-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LD:WG119964-12 L55077-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	6.89	6.77	2		0--20

(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	4.23	10	14.4	102		75--125

MB:WG119964-14 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG119964-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.21	92		85--115

MB:WG119964-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG119964-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

MB:WG119964-18 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG119964-19 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	10.4	104		85--115

WG120092

MB:WG120092-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120092-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.75	97		85--115

SB:WG120092-3 MB:WG120092-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

LD:WG120092-4 L55139-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.73	2.84	4		0--20

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MS:WG120092-5 L55214-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.89	10	11.3	104		75--125

MS:WG120092-6 L55186-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	28.3	10	52.6	122		75--125

MB:WG120092-7 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120092-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.5	105		85--115

LD:WG120092-9 L55210-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.56	5.82	5		0--20

MS:WG120092-10 L55210-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.77	10	14.8	81		75--125

MB:WG120092-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG120092-12 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	10	100		85--115

MB:WG120092-13 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

SB:WG120092-14 MB:WG120092-13 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	10	10.3	103		80--120

LD:WG120092-15 L55177-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	5.61	5.56	1		0--20

MS:WG120092-16 L55177-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	4.17	10	14.5	104		75--125

MB:WG120092-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LD:WG120092-18 L55210-2 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	4.55	4.66	2		0--20

MS:WG120092-19 L55210-4 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	4.02	10	14.8	108		75--125

MB:WG120092-20 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120092-21 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.28	93		85--115

LD:WG120092-22 L55186-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	15	30	mg/L	503	539	7		0--20

WG120155

MB:WG120155-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

LCS:WG120155-2 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	10	9.73	97		85--115

LD:WG120155-3 L55283-4 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	1.54	1.44	6		0--20

MB:WG120155-4 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

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SB:WG120155-5 MB:WG120155-4 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	10	10.3	103		80--120

MS:WG120155-6 L55231-5 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:422027 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbor	0.5	1	mg/L	5.4	10	15.7	103		75--125

MB:WG120155-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbor	0.5	1	mg/L	<MDL	

MB:WG120155-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120155-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.95	100		85--115

SB:WG120155-10 MB:WG120155-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.54	95		80--120

LD:WG120155-11 L55224-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	5.59	5.54	1		0--20

MS:WG120155-12 L55224-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.97	10	13.8	98		75--125

LD:WG120155-13 L55219-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.91	0.9			0--20

MS:WG120155-14 L55219-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-DUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.36	10	11.5	101		75--125

MB:WG120155-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

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LCS:WG120155-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.82	98		85--115

MB:WG120155-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120155-18 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.84	98		85--115

SB:WG120155-19 MB:WG120155-17 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.5	95		80--120

LD:WG120155-20 L55239-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	18.3	16.2	12		0--20

MS:WG120155-21 L55239-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	12.1	10	23	109		75--125

LD:WG120155-22 L55217-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	18	35	mg/L	262	263	0		0--20

MS:WG120155-23 L55217-3 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	5	10	mg/L	83.2	10	181	98		75--125

MB:WG120155-24 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120155-25 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.03	90		85--115

LD:WG120155-26 L55231-5 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	9	9.44	5		0--20

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TOC and DOC (#1)

MS:WG120155-27 L55283-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.69	10	14.2	95		75--125

LIMSView Batch Report for Green River Bulk Water Storm Samples - Data Validation for TOC and DOC (#2)

WG120382

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55043-1	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarterly	CVTOC	FRESH WTR	03/27/12	03/28/12	03/28/12	
L55043-3	421422-CFSW	SWD-CFSW Cedar Falls Surface Water Quarterly	CVTOC	FRESH WTR	03/27/12	03/28/12	03/28/12	
L55154-1	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55154-1	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55154-2	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55154-2	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55154-3	423589-320-4	CSO Basin Study	CVDOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55154-3	423589-320-4	CSO Basin Study	CVTOC	SEWER WTR	03/26/12	03/28/12	03/28/12	
L55194-1	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	03/19/12	03/20/12	03/28/12	
L55194-2	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	03/19/12	03/20/12	03/28/12	
L55194-3	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	FRESH WTR	03/19/12	03/20/12	03/27/12	
L55195-1	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	03/19/12	03/20/12	03/27/12	
L55195-2	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	03/19/12	03/20/12	03/27/12	
L55195-3	423589-030-1	LDWG-Water Column PCB Analysis	CVDOC	SALT WTR	03/19/12	03/20/12	03/27/12	
L55240-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/28/12	03/29/12	03/29/12	
L55274-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/23/12	03/28/12	03/28/12	
L55274-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/22/12	03/28/12	03/28/12	
L55277-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/26/12	03/28/12	03/28/12	
L55277-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/28/12	03/29/12	03/29/12	
L55277-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/27/12	03/28/12	03/28/12	
L55278-1	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	CVTOC	FRESH WTR	03/28/12	03/29/12	03/29/12	
L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/27/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/27/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/27/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/27/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/28/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/20/12	03/22/12	03/28/12	
L55309-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/14/12	03/15/12	03/27/12	
L55317-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/22/12	03/28/12	03/28/12	
L55358-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/22/12	03/28/12	03/28/12	
L55358-2	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	03/22/12	03/28/12	03/28/12	
L55362-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/26/12	03/28/12	03/28/12	
WG120382-1	MB		CVDOC	BLANK WTR		03/20/12	03/27/12	MB1 120320
WG120382-2	LCS		CVDOC	BLANK WTR		03/27/12	03/27/12	LEVEL1
WG120382-3	SB		CVDOC	BLANK WTR		03/20/12	03/27/12	WG120382-1
WG120382-4	LD		CVDOC	SALT WTR		03/20/12	03/27/12	L55195-3
WG120382-5	MB		CVDOC	BLANK WTR		03/15/12	03/27/12	MB1 120315
WG120382-6	MB		CVDOC	BLANK WTR		03/22/12	03/27/12	MB1 120322

WG120382-7	LD		CVDOC	STORM WTR		03/22/12	03/27/12	L55284-2
WG120382-8	MS		CVDOC	STORM WTR		03/22/12	03/28/12	L55284-4
WG120382-9	MB		CVTOC	BLANK WTR		03/28/12	03/28/12	MB1 120327
WG120382-10	LCS		CVTOC	BLANK WTR		03/28/12	03/28/12	LEVEL1
WG120382-11	SB		CVTOC	BLANK WTR		03/28/12	03/28/12	WG120382-9
WG120382-12	MS		CVTOC	FRESH WTR		03/28/12	03/28/12	L55043-3
WG120382-13	LD		CVTOC	GRND WTR		03/28/12	03/28/12	L55274-1
WG120382-14	MS		CVTOC	GRND WTR		03/28/12	03/28/12	L55274-3
WG120382-15	MB		CVTOC	BLANK WTR		03/28/12	03/28/12	MB1 120328
WG120382-16	LCS		CVTOC	BLANK WTR		03/28/12	03/28/12	LEVEL1
WG120382-17	SB		CVTOC	BLANK WTR		03/28/12	03/28/12	WG120382-15
WG120382-18	LD		CVTOC	SEWER WTR		03/28/12	03/28/12	L55154-1
WG120382-19	MS		CVTOC	SEWER WTR		03/28/12	03/28/12	L55154-3
WG120382-20	MB		CVDOC	BLANK WTR		03/28/12	03/28/12	MB1 120328
WG120382-21	LCS		CVDOC	BLANK WTR		03/28/12	03/28/12	LEVEL1
WG120382-22	SB		CVDOC	BLANK WTR		03/28/12	03/28/12	WG120382-20
WG120382-23	LD		CVDOC	SEWER WTR		03/28/12	03/28/12	L55154-1
WG120382-24	MS		CVDOC	SEWER WTR		03/28/12	03/28/12	L55154-3
WG120382-25	MS		CVDOC	FRESH WTR		03/20/12	03/28/12	L55194-1
WG120382-26	LD		CVTOC	FRESH WTR		03/28/12	03/28/12	L55043-1
WG120382-27	MB		CVTOC	BLANK WTR		03/29/12	03/29/12	MB1 120329
WG120382-28	LCS		CVTOC	BLANK WTR		03/29/12	03/29/12	LEVEL1

WG120560

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55066-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTOC	FRESH WTR	03/29/12	04/03/12	04/03/12	
L55185-1	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	03/27/12	03/28/12	04/05/12	
L55185-1	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	03/27/12	04/04/12	04/04/12	
L55185-2	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	03/27/12	03/28/12	04/05/12	
L55185-2	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	03/27/12	04/04/12	04/04/12	
L55185-3	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	03/27/12	03/28/12	04/06/12	
L55185-3	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	03/27/12	04/04/12	04/04/12	
L55233-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/30/12	04/03/12	04/03/12	
L55233-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/29/12	04/03/12	04/03/12	
L55233-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/29/12	04/03/12	04/03/12	
L55233-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/29/12	04/03/12	04/03/12	
L55268-1	421422-CHGW-NP	SWD-CHGW-NP Cedar Hills Groundwater Non-Potable	CVTOC	GRND WTR	03/30/12	04/03/12	04/03/12	
L55270-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/03/12	04/03/12	04/03/12	
L55270-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/03/12	04/04/12	04/04/12	
L55285-2	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	03/28/12	03/30/12	04/05/12	

L55285-2	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	03/28/12	04/03/12	04/03/12	
L55285-3	423589-320-4	CSO Basin Study	CVDOC	STORM WTR	03/28/12	03/30/12	04/05/12	
L55285-3	423589-320-4	CSO Basin Study	CVTOC	STORM WTR	03/28/12	04/03/12	04/03/12	
L55356-3	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTOC	FRESH WTR	03/29/12	04/03/12	04/03/12	
L55356-6	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTOC	FRESH WTR	03/29/12	04/03/12	04/03/12	
L55356-7	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTOC	FRESH WTR	03/29/12	04/03/12	04/03/12	
L55381-1	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	04/03/12	04/04/12	04/05/12	
L55381-1	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	04/03/12	04/04/12	04/04/12	
L55381-2	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	04/03/12	04/04/12	04/05/12	
L55381-2	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	04/03/12	04/04/12	04/04/12	
L55381-3	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	04/03/12	04/04/12	04/05/12	
L55381-3	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	04/03/12	04/04/12	04/04/12	
L55381-4	421195-190	Vashon Island Surface Water	CVDOC	FRESH WTR	04/03/12	04/04/12	04/05/12	
L55381-4	421195-190	Vashon Island Surface Water	CVTOC	FRESH WTR	04/03/12	04/04/12	04/04/12	
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/29/12	03/30/12	04/05/12	
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/29/12	04/03/12	04/03/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/29/12	03/30/12	04/05/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/29/12	04/03/12	04/03/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/29/12	03/30/12	04/05/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/29/12	04/03/12	04/03/12	
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	03/29/12	03/30/12	04/05/12	FREP@L55384-3
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/29/12	04/03/12	04/03/12	FREP@L55384-3
L55391-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/29/12	03/30/12	04/05/12	
L55391-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/29/12	04/04/12	04/04/12	
L55391-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/30/12	03/31/12	04/05/12	
L55391-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/30/12	04/04/12	04/04/12	
L55397-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/03/12	04/04/12	04/04/12	
L55397-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/03/12	04/04/12	04/04/12	
L55399-1	421422-VALS-Q	SWD-VALS-Q Vashon Leachate Quarterly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55399-3	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55400-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55400-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55400-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55400-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	04/04/12	04/06/12	04/06/12	
L55402-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/03/12	04/03/12	04/03/12	
L55402-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/04/12	04/06/12	04/06/12	
L55402-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55402-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55403-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55403-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/05/12	04/06/12	04/06/12	
L55403-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/05/12	04/06/12	04/06/12	

L55403-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55405-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55405-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/06/12	04/06/12	04/06/12	
L55450-5	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	04/03/12	04/04/12	04/05/12	
L55450-5	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	04/03/12	04/04/12	04/04/12	
WG120560-1	MB		CVTOC	BLANK WTR		04/03/12	04/03/12	MB1 120403
WG120560-2	LCS		CVTOC	BLANK WTR		04/03/12	04/03/12	LEVEL1
WG120560-3	SB		CVTOC	BLANK WTR		04/03/12	04/03/12	WG120560-1
WG120560-4	MS		CVTOC	GRND WTR		04/03/12	04/03/12	L55233-5
WG120560-5	LD		CVTOC	FRESH WTR		04/03/12	04/03/12	L55356-3
WG120560-6	LD		CVTOC	STORM WTR		04/03/12	04/03/12	L55384-2
WG120560-7	MS		CVTOC	STORM WTR		04/03/12	04/03/12	L55384-4
WG120560-8	MB		CVTOC	BLANK WTR		04/04/12	04/04/12	MB2 120403
WG120560-9	LCS		CVTOC	BLANK WTR		04/04/12	04/04/12	LEVEL1
WG120560-10	LD		CVTOC	FRESH WTR		04/04/12	04/04/12	L55381-1
WG120560-11	MS		CVTOC	FRESH WTR		04/04/12	04/04/12	L55381-4
WG120560-12	MB		CVTOC	BLANK WTR		04/04/12	04/04/12	MB1 120404
WG120560-13	LCS		CVTOC	BLANK WTR		04/04/12	04/04/12	LEVEL1
WG120560-14	SB		CVTOC	BLANK WTR		04/04/12	04/04/12	WG120560-12
WG120560-15	LD		CVTOC	GRND WTR		04/04/12	04/04/12	L55270-2
WG120560-16	MS		CVTOC	FRESH WTR		04/04/12	04/04/12	L55356-6
WG120560-17	MB		CVDOC	BLANK WTR		04/04/12	04/05/12	MB1 120404
WG120560-18	LCS		CVDOC	BLANK WTR		04/05/12	04/05/12	LEVEL1
WG120560-19	SB		CVDOC	BLANK WTR		04/04/12	04/05/12	WG120560-17
WG120560-20	LD		CVDOC	FRESH WTR		04/04/12	04/05/12	L55381-1
WG120560-21	MS		CVDOC	FRESH WTR		04/04/12	04/05/12	L55381-3
WG120560-22	MB		CVDOC	BLANK WTR		03/30/12	04/05/12	MB2 120330
WG120560-23	LD		CVDOC	STORM WTR		03/30/12	04/05/12	L55384-1
WG120560-24	MS		CVDOC	STORM WTR		03/30/12	04/05/12	L55384-3
WG120560-25	MB		CVDOC	BLANK WTR		03/30/12	04/05/12	MB1 120330
WG120560-26	MB		CVDOC	BLANK WTR		03/28/12	04/05/12	MB1 120328
WG120560-27	LCS		CVDOC	BLANK WTR		04/05/12	04/05/12	LEVEL1
WG120560-28	LD		CVDOC	STORM WTR		03/28/12	04/05/12	L55185-2
WG120560-29	MS		CVDOC	STORM WTR		03/28/12	04/06/12	L55185-3
WG120560-30	MB		CVTOC	BLANK WTR		04/06/12	04/06/12	MB1 120405
WG120560-31	LCS		CVTOC	BLANK WTR		04/06/12	04/06/12	LEVEL1
WG120560-32	SB		CVTOC	BLANK WTR		04/06/12	04/06/12	WG120560-30
WG120560-33	LD		CVTOC	GRND WTR		04/06/12	04/06/12	L55402-2
WG120560-34	MS		CVTOC	GRND WTR		04/06/12	04/06/12	L55403-5
WG120560-35	MB		CVDOC	BLANK WTR		03/31/12	04/06/12	MB1 120331
WG120560-36	MB		CVTOC	BLANK WTR		04/06/12	04/06/12	MB1 120406

WG120560-37	LCS		CVTOC	BLANK WTR		04/06/12	04/06/12	LEVEL1
WG120560-38	SB		CVTOC	BLANK WTR		04/06/12	04/06/12	WG120560-36
WG120560-39	LD		CVTOC	LEACHATE		04/06/12	04/06/12	L55399-1
WG120560-40	MS		CVTOC	LEACHATE		04/06/12	04/06/12	L55400-5

WG123061

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56427-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/07/12	09/13/12	09/13/12	
L56427-5	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/07/12	09/14/12	09/14/12	
L56428-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56428-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/07/12	09/13/12	09/13/12	
L56428-4	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56430-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/10/12	09/13/12	09/13/12	
L56430-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56430-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	09/11/12	09/13/12	09/13/12	
L56432-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56432-3	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56453-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/14/12	09/14/12	
WG123061-1	MB		CVTOC	BLANK WTR		09/13/12	09/13/12	MB1 120913
WG123061-2	LCS		CVTOC	BLANK WTR		09/13/12	09/13/12	LEVEL1
WG123061-3	SB		CVTOC	BLANK WTR		09/13/12	09/13/12	WG123061-1
WG123061-4	MS		CVTOC	GRND WTR		09/13/12	09/13/12	L56428-1
WG123061-5	LD		CVTOC	FRESH WTR		09/13/12	09/13/12	L56484-4
WG123061-6	MS		CVTOC	FRESH WTR		09/13/12	09/13/12	L56484-5
WG123061-7	MB		CVDOC	BLANK WTR		09/13/12	09/14/12	MB1 120913
WG123061-8	LCS		CVDOC	BLANK WTR		09/14/12	09/14/12	LEVEL1
WG123061-9	SB		CVDOC	BLANK WTR		09/13/12	09/14/12	WG123061-7
WG123061-10	LD		CVDOC	FRESH WTR		09/13/12	09/14/12	L56484-3

WG123061-11	MS		CVDOC	FRESH WTR		09/13/12	09/14/12	L56484-4
WG123061-12	LD		CVTOC	GRND WTR		09/14/12	09/14/12	L56427-5

WG124253

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/31/12	11/02/12	11/15/12	SAMP
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/31/12	11/16/12	11/16/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/31/12	11/02/12	11/15/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/31/12	11/16/12	11/16/12	SAMP
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	10/31/12	11/02/12	11/15/12	FREP@L55434-2
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	10/31/12	11/16/12	11/16/12	FREP@L55434-2
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	BLANK WTR	10/31/12	11/02/12	11/16/12	Field Blank
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	BLANK WTR	10/31/12	11/16/12	11/16/12	Field Blank
L56913-1	421422-VALS-M	SWD-VALS-M Vashon Leachate Monthly	CVTOC	LEACHATE	11/14/12	11/16/12	11/16/12	
L56914-1	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	11/14/12	11/16/12	11/16/12	
L56914-3	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	11/14/12	11/16/12	11/16/12	
L56914-4	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	11/14/12	11/16/12	11/16/12	
L56914-5	421422-CHLS-M	SWD-CHLS-M Cedar Hills Leachate Monthly	CVTOC	LEACHATE	11/14/12	11/16/12	11/16/12	
L56919-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/15/12	11/16/12	11/16/12	
L56919-3	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/15/12	11/16/12	11/16/12	
L56933-2	421422-VAGW-APP3	SWD-VAGW-Appendix III GW Analytes	CVTOC	GRND WTR	11/15/12	11/16/12	11/16/12	
WG124253-1	MB		CVDOC	BLANK WTR		11/02/12	11/15/12	MB1 121102 3:00
WG124253-2	LCS		CVDOC	BLANK WTR		11/15/12	11/15/12	LEVEL1
WG124253-3	SB		CVDOC	BLANK WTR		11/02/12	11/15/12	WG124253-1
WG124253-4	LD		CVDOC	STORM WTR		11/02/12	11/15/12	L55434-1
WG124253-5	MS		CVDOC	STORM WTR		11/02/12	11/15/12	L55434-3
WG124253-6	LD		CVTOC	GRND WTR		11/16/12	11/16/12	L56919-1
WG124253-7	MS		CVTOC	GRND WTR		11/16/12	11/16/12	L56919-3
WG124253-8	MB		CVTOC	BLANK WTR		11/16/12	11/16/12	MB1 121115
WG124253-9	LCS		CVTOC	BLANK WTR		11/16/12	11/16/12	LEVEL1
WG124253-10	SB		CVTOC	BLANK WTR		11/16/12	11/16/12	WG124253-8
WG124253-11	LD		CVTOC	STORM WTR		11/16/12	11/16/12	L55434-2
WG124253-12	MS		CVTOC	STORM WTR		11/16/12	11/16/12	L55434-3
WG124253-13	LD		CVTOC	LEACHATE		11/16/12	11/16/12	L56914-3
WG124253-14	MS		CVTOC	LEACHATE		11/16/12	11/16/12	L56914-4

WG124397

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56888-4	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	11/20/12	11/28/12	11/28/12	

L56892-3	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/16/12	11/28/12	11/28/12	
L56894-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTOC	GRND WTR	11/16/12	11/28/12	11/28/12	
L56915-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTOC	GRND WTR	11/26/12	11/28/12	11/28/12	
L56917-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/16/12	11/28/12	11/28/12	
L56926-3	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/26/12	11/28/12	11/28/12	
L56929-1	421422-ENGW	SWD-ENGW Enumclaw Groundwater Quarterly	CVTOC	GRND WTR	11/26/12	11/28/12	11/28/12	
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	11/19/12	11/20/12	11/28/12	
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	11/19/12	11/28/12	11/28/12	
L57003-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	11/20/12	11/28/12	11/28/12	
L57003-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTOC	GRND WTR	11/20/12	11/28/12	11/28/12	
WG124397-1	MB		CVTOC	BLANK WTR		11/28/12	11/28/12	MB1 121128
WG124397-2	LCS		CVTOC	BLANK WTR		11/28/12	11/28/12	LEVEL1
WG124397-3	MB		CVDOC	BLANK WTR		11/20/12	11/28/12	MB1 121120
WG124397-4	LCS		CVDOC	BLANK WTR		11/28/12	11/28/12	LEVEL1
WG124397-5	SB		CVDOC	BLANK WTR		11/20/12	11/28/12	WG124397-3
WG124397-6	MS		CVDOC	STORM WTR		11/20/12	11/28/12	L56994-1
WG124397-7	MB		CVTOC	BLANK WTR		11/28/12	11/28/12	MB1 121126
WG124397-8	LCS		CVTOC	BLANK WTR		11/28/12	11/28/12	LEVEL1
WG124397-9	SB		CVTOC	BLANK WTR		11/28/12	11/28/12	WG124397-7
WG124397-10	MS		CVTOC	STORM WTR		11/28/12	11/28/12	L56994-1
WG124397-11	LD		CVTOC	GRND WTR		11/28/12	11/28/12	L56888-4
WG124397-12	MS		CVTOC	GRND WTR		11/28/12	11/28/12	L56929-1

WG120341

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55194-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	03/19/12	03/21/12	03/21/12	
L55194-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	03/19/12	03/21/12	03/21/12	
L55194-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	03/19/12	03/21/12	03/21/12	
L55195-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	03/19/12	03/21/12	03/21/12	
L55195-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	03/19/12	03/21/12	03/21/12	
L55195-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	03/19/12	03/21/12	03/21/12	
L55219-5	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/15/12	03/21/12	03/21/12	
L55236-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTOC	GRND WTR	03/15/12	03/21/12	03/21/12	
L55241-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	03/15/12	03/21/12	03/21/12	
L55243-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/19/12	03/21/12	03/21/12	
L55243-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/19/12	03/21/12	03/21/12	
L55269-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/20/12	03/21/12	03/21/12	
L55269-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/20/12	03/21/12	03/21/12	
L55272-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/21/12	03/23/12	03/23/12	
L55272-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTOC	GRND WTR	03/21/12	03/23/12	03/23/12	

L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	03/20/12	03/23/12	03/23/12	
L55309-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/14/12	03/21/12	03/21/12	
L55319-1	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/15/12	03/16/12	03/22/12	
L55319-1	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/15/12	03/21/12	03/21/12	
L55319-2	422027	Lab Lake Wash PBT-EPA Grant	CVDOC	STORM WTR	03/15/12	03/16/12	03/22/12	
L55319-2	422027	Lab Lake Wash PBT-EPA Grant	CVTOC	STORM WTR	03/15/12	03/21/12	03/21/12	
WG120341-1	MB		CVTOC	BLANK WTR		03/21/12	03/21/12	MB1 120321
WG120341-2	LCS		CVTOC	BLANK WTR		03/21/12	03/21/12	LEVEL1
WG120341-3	SB		CVTOC	BLANK WTR		03/21/12	03/21/12	WG120341-1
WG120341-4	LD		CVTOC	GRND WTR		03/21/12	03/21/12	L55243-3
WG120341-5	MS		CVTOC	GRND WTR		03/21/12	03/21/12	L55269-3
WG120341-6	MS		CVTOC	FRESH WTR		03/21/12	03/21/12	L55194-1
WG120341-7	LD		CVTOC	SALT WTR		03/21/12	03/21/12	L55195-3
WG120341-8	MS		CVTOC	STORM WTR		03/21/12	03/21/12	L55319-2
WG120341-9	LD		CVTOC	STORM WTR		03/21/12	03/21/12	L55309-1
WG120341-10	MB		CVDOC	BLANK WTR		03/16/12	03/22/12	MB1 120316
WG120341-11	LCS		CVDOC	BLANK WTR		03/22/12	03/22/12	LEVEL1
WG120341-12	SB		CVDOC	BLANK WTR		03/16/12	03/22/12	WG120341-10
WG120341-13	LD		CVDOC	STORM WTR		03/16/12	03/22/12	L55319-1
WG120341-14	MS		CVDOC	STORM WTR		03/16/12	03/22/12	L55319-2
WG120341-15	MB		CVTOC	BLANK WTR		03/23/12	03/23/12	MB1 120322
WG120341-16	LCS		CVTOC	BLANK WTR		03/23/12	03/23/12	LEVEL1
WG120341-17	SB		CVTOC	BLANK WTR		03/23/12	03/23/12	WG120341-15
WG120341-18	LD		CVTOC	STORM WTR		03/23/12	03/23/12	L55284-3
WG120341-19	MS		CVTOC	STORM WTR		03/23/12	03/23/12	L55284-5
WG120341-20	LD		CVTOC	GRND WTR		03/23/12	03/23/12	L55272-1
WG120341-21	MS		CVTOC	GRND WTR		03/23/12	03/23/12	L55272-3

WG120777

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55371-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55371-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55371-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55372-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	04/16/12	04/19/12	04/19/12	
L55372-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	04/16/12	04/19/12	04/19/12	

L55372-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTOC	SALT WTR	04/16/12	04/19/12	04/19/12	
L55405-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/09/12	04/19/12	04/19/12	
L55405-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/09/12	04/19/12	04/19/12	
L55436-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/09/12	04/18/12	04/18/12	
L55436-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/09/12	04/18/12	04/18/12	
L55436-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/10/12	04/18/12	04/18/12	
L55438-1	421422-CHSW-A5-TD	SWD-CHSW - A5 TD Cedar Hills Surface Area 5 Top Deck	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55438-2	421422-CHSW-A5-TD	SWD-CHSW - A5 TD Cedar Hills Surface Area 5 Top Deck	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55440-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55440-2	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/16/12	04/19/12	04/19/12	
L55440-3	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/17/12	04/19/12	04/19/12	
L55440-4	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/17/12	04/19/12	04/19/12	
L55440-5	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/17/12	04/19/12	04/19/12	
L55440-6	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTOC	FRESH WTR	04/17/12	04/19/12	04/19/12	
L55444-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/10/12	04/18/12	04/18/12	
L55444-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/10/12	04/18/12	04/18/12	
L55444-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/12/12	04/18/12	04/18/12	
L55446-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/16/12	04/19/12	04/19/12	
L55446-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/16/12	04/19/12	04/19/12	
L55446-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/16/12	04/19/12	04/19/12	
L55471-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/17/12	04/19/12	04/19/12	
L55471-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/17/12	04/19/12	04/19/12	
L55471-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTOC	GRND WTR	04/17/12	04/19/12	04/19/12	
L55532-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	BLANK WTR	04/10/12	04/19/12	04/19/12	
L55532-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	BLANK WTR	04/17/12	04/19/12	04/19/12	
WG120777-1	MB		CVTOC	BLANK WTR		04/18/12	04/18/12	MB1 120418
WG120777-2	LCS		CVTOC	BLANK WTR		04/18/12	04/18/12	LEVEL1
WG120777-3	LCS		CVTOC	BLANK WTR		04/19/12	04/19/12	LEVEL1
WG120777-4	SB		CVTOC	BLANK WTR		04/19/12	04/19/12	WG120777-1
WG120777-5	LD		CVTOC	GRND WTR		04/19/12	04/19/12	L55446-1
WG120777-6	MS		CVTOC	GRND WTR		04/19/12	04/19/12	L55446-5
WG120777-7	LD		CVTOC	FRESH WTR		04/19/12	04/19/12	L55440-2
WG120777-8	MS		CVTOC	FRESH WTR		04/19/12	04/19/12	L55440-6
WG120777-9	MB		CVTOC	BLANK WTR		04/19/12	04/19/12	MB2 120418
WG120777-10	LCS		CVTOC	BLANK WTR		04/19/12	04/19/12	LEVEL1
WG120777-11	MS		CVTOC	FRESH WTR		04/19/12	04/19/12	L55371-3
WG120777-12	LD		CVTOC	SALT WTR		04/19/12	04/19/12	L55372-2

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WG120382

MB:WG120382-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120382-2 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.9	99		85--115

SB:WG120382-3 MB:WG120382-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

LD:WG120382-4 L55195-3 Matrix: SALT WTR Listtype:CVDOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.78	1.62	9		0--20

MB:WG120382-5 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

MB:WG120382-6 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LD:WG120382-7 L55284-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	4.44	4.09	8		0--20

MS:WG120382-8 L55284-4 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.57	10	12.3	108		75--125

MB:WG120382-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120382-10 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.43	94		85--115

SB:WG120382-11 MB:WG120382-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

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MS:WG120382-12 L55043-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.85	10	11.8	109		75--125

LD:WG120382-13 L55274-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.68	3.99	8		0--20

MS:WG120382-14 L55274-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.3	10	11.7	104		75--125

MB:WG120382-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120382-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

SB:WG120382-17 MB:WG120382-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.61	96		80--120

LD:WG120382-18 L55154-1 Matrix: SEWER WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	15	30	mg/L	704	725	3		0--20

MS:WG120382-19 L55154-3 Matrix: SEWER WTR Listtype:CVTOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	15	30	mg/L	226	10	559	111		75--125

MB:WG120382-20 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120382-21 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	10.5	105		85--115

SB:WG120382-22 MB:WG120382-20 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	11.1	111		80--120

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LD:WG120382-23 L55154-1 Matrix: SEWER WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	15	30	mg/L	434	454	4		0--20

MS:WG120382-24 L55154-3 Matrix: SEWER WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	15	30	mg/L	44	10	397	118		75--125

MS:WG120382-25 L55194-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.15	10	13.4	113		75--125

LD:WG120382-26 L55043-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.08	6.8	106	*	0--20

MB:WG120382-27 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120382-28 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.39	94		85--115

WG120560

MB:WG120560-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.08	91		85--115

SB:WG120560-3 MB:WG120560-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.24	92		80--120

MS:WG120560-4 L55233-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.34	10	11.8	105		75--125

LD:WG120560-5 L55356-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW-2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	40.4	35	14		0--20

LD:WG120560-6 L55384-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.1	6.16	1		0--20

MS:WG120560-7 L55384-4 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.45	10	11.1	96		75--125

MB:WG120560-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.36	94		85--115

LD:WG120560-10 L55381-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.78	4.76	0		0--20

MS:WG120560-11 L55381-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.21	10	13.4	92		75--125

MB:WG120560-12 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-13 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.1	91		85--115

SB:WG120560-14 MB:WG120560-12 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	8.88	89		80--120

LD:WG120560-15 L55270-2 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.9	0.92			0--20

MS:WG120560-16 L55356-6 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-VASW-2 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	21.5	10	61.7	80		75--125

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MB:WG120560-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-18 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.65	96		85--115

SB:WG120560-19 MB:WG120560-17 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	9.95	100		80--120

LD:WG120560-20 L55381-1 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	4.77	4.36	9		0--20

MS:WG120560-21 L55381-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:421195-190 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	5.76	10	14.9	91		75--125

MB:WG120560-22 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LD:WG120560-23 L55384-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	7.16	7.23	1		0--20

MS:WG120560-24 L55384-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.24	10	10.3	90		75--125

MB:WG120560-25 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

MB:WG120560-26 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-27 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.38	94		85--115

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LD:WG120560-28 L55185-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	2.5	5	mg/L	91.3	90	1		0--20

MS:WG120560-29 L55185-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	2.5	5	mg/L	52.2	10	99.8	95		75--125

MB:WG120560-30 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-31 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.43	94		85--115

SB:WG120560-32 MB:WG120560-30 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	8.98	90		80--120

LD:WG120560-33 L55402-2 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.83	0.72			0--20

MS:WG120560-34 L55403-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.66	10	10.4	97		75--125

MB:WG120560-35 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

MB:WG120560-36 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120560-37 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.82	98		85--115

SB:WG120560-38 MB:WG120560-36 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.7	107		80--120

LD:WG120560-39 L55399-1 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-VALS-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	7.31	6.83	7		0--20

MS:WG120560-40 L55400-5 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	18	35	mg/L	439	10	747	88		75--125

WG123061

MB:WG123061-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG123061-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.73	97		85--115

SB:WG123061-3 MB:WG123061-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.26	93		80--120

MS:WG123061-4 L56428-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.08	10	11.2	101		75--125

LD:WG123061-5 L56484-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.47	2.35	5		0--20

MS:WG123061-6 L56484-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.39	10	12.6	102		75--125

MB:WG123061-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG123061-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.74	97		85--115

SB:WG123061-9 MB:WG123061-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.8	108		80--120

LD:WG123061-10 L56484-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.02	1.87	8		0--20

MS:WG123061-11 L56484-4 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.93	10	12.5	106		75--125

LD:WG123061-12 L56427-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.09	1.01	8		0--20

WG124253

MB:WG124253-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124253-2 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.84	98		85--115

SB:WG124253-3 MB:WG124253-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.5	105		80--120

LD:WG124253-4 L55434-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	8.98	9.67	7		0--20

MS:WG124253-5 L55434-3 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	6.88	10	17.2	103		75--125

LD:WG124253-6 L56919-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-ENGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	0.53			0--20

MS:WG124253-7 L56919-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-ENGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.61	10	11.3	107		75--125

MB:WG124253-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

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LCS:WG124253-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.4	104		85--115

SB:WG124253-10 MB:WG124253-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.6	106		80--120

LD:WG124253-11 L55434-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	7.5	7.45	1		0--20

MS:WG124253-12 L55434-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.89	10	17	101		75--125

LD:WG124253-13 L56914-3 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	5	10	mg/L	16	16.5	3		0--20

MS:WG124253-14 L56914-4 Matrix: LEACHATE Listtype:CVTOC Method:SM5310-B Project:421422-CHLS-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	18	35	mg/L	523	10	869	99		75--125

WG124397

MB:WG124397-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124397-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.2	102		85--115

MB:WG124397-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124397-4 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.97	100		85--115

SB:WG124397-5 MB:WG124397-3 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.8	108		80--120

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MS:WG124397-6 L56994-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	14.8	10	23.6	88		75--125

MB:WG124397-7 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124397-8 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.93	99		85--115

SB:WG124397-9 MB:WG124397-7 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.1	101		80--120

MS:WG124397-10 L56994-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	1.5	3	mg/L	18.8	10	49.5	102		75--125

LD:WG124397-11 L56888-4 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HOGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.12	0.99	13		0--20

MS:WG124397-12 L56929-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-ENGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.16	10	11.4	103		75--125

WG120341

MB:WG120341-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120341-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.95	99		85--115

SB:WG120341-3 MB:WG120341-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.3	103		80--120

LD:WG120341-4 L55243-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.4	1.32	6		0--20

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MS:WG120341-5 L55269-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.22	10	11.5	103		75--125

MS:WG120341-6 L55194-1 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.9	10	11.9	100		75--125

LD:WG120341-7 L55195-3 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.93	2.03	5		0--20

MS:WG120341-8 L55319-2 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:422027 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	2.5	5	mg/L	49.4	10	92.8	87		75--125

LD:WG120341-9 L55309-1 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	1	2	mg/L	6.82	7.09	4		0--20

MB:WG120341-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120341-11 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.28	93		85--115

SB:WG120341-12 MB:WG120341-10 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10	100		80--120

LD:WG120341-13 L55319-1 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	23.1	22.9	1		0--20

MS:WG120341-14 L55319-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:422027 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	23.5	10	33.4	99		75--125

MB:WG120341-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

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LCS:WG120341-16 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.38	94		85--115

SB:WG120341-17 MB:WG120341-15 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9	90		80--120

LD:WG120341-18 L55284-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	8.68	8.49	2		0--20

MS:WG120341-19 L55284-5 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	6.05	10	15.9	99		75--125

LD:WG120341-20 L55272-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.22	1.15	6		0--20

MS:WG120341-21 L55272-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-PUGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.8	10	10.6	98		75--125

WG120777

MB:WG120777-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120777-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	8.58	86		85--115

LCS:WG120777-3 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.87	99		85--115

SB:WG120777-4 MB:WG120777-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.62	96		80--120

LD:WG120777-5 L55446-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.87	0.82			0--20

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MS:WG120777-6 L55446-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	0.88	10	11.2	103		75--125

LD:WG120777-7 L55440-2 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.69	4.86	4		0--20

MS:WG120777-8 L55440-6 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	3.43	10	13.2	98		75--125

MB:WG120777-9 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG120777-10 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	10.1	101		85--115

MS:WG120777-11 L55371-3 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.99	10	11.4	94		75--125

LD:WG120777-12 L55372-2 Matrix: SALT WTR Listtype:CVTOC Method:SM5310-B Project:423589-030-1 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.64	1.75	7		0--20

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WG118621

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54191-1	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54191-2	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54191-3	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54191-4	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54191-5	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54191-6	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	11/17/11	11/18/11	11/21/11	
L54285-1	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54285-2	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54285-3	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54285-4	421195-180	Mercer Island Stormwater Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54351-1	421422-ENLS	SWD-ENLS Enumclaw Wastewater Permit	CVTSS	IW WTR	11/15/11	11/18/11	11/21/11	
L54534-1	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-2	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-3	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-4	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-6	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-7	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-8	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-9	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-11	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-12	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-13	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-15	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-16	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/14/11	11/18/11	11/21/11	
L54534-19	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/15/11	11/18/11	11/21/11	
L54534-20	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/15/11	11/18/11	11/21/11	
L54534-22	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/15/11	11/18/11	11/21/11	
L54534-23	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/15/11	11/18/11	11/21/11	
L54565-1	421195-140	Lake Sawyer	CVTSS	FRESH WTR	11/13/11	11/18/11	11/21/11	
L54565-2	421195-140	Lake Sawyer	CVTSS	FRESH WTR	11/13/11	11/18/11	11/21/11	
L54565-3	421195-140	Lake Sawyer	CVTSS	FRESH WTR	11/13/11	11/18/11	11/21/11	
L54573-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/16/11	11/18/11	11/21/11	
L54574-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/15/11	11/18/11	11/21/11	
L54576-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/14/11	11/18/11	11/21/11	
L54576-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/14/11	11/18/11	11/21/11	
L54578-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/14/11	11/18/11	11/21/11	
L54578-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/15/11	11/18/11	11/21/11	
L54579-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/15/11	11/18/11	11/21/11	

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L54579-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	11/18/11	11/18/11	11/21/11	
L54604-1	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/11	11/18/11	11/21/11	
L54604-2	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/11	11/18/11	11/21/11	
L54604-3	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/11	11/18/11	11/21/11	
L54604-4	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/11	11/18/11	11/21/11	
L54604-5	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/16/11	11/18/11	11/21/11	
L54604-6	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54604-7	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54604-8	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54604-9	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54604-11	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54604-12	421422-CHSW-M	SWD-CHSW M Cedar Hills Surface Water Monthly	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54624-1	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54624-2	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54625-1	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54626-2	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/14/11	11/18/11	11/21/11	
L54627-1	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/15/11	11/18/11	11/21/11	
L54661-1	421879-220	NPDES SW Sammamish	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54675-1	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54675-2	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54675-3	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	11/17/11	11/18/11	11/21/11	
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/16/11	11/18/11	11/21/11	
WG118621-	MB		CVTSS	BLANK WTR		11/18/11	11/21/11	MB1 111118
WG118621-	LCS		CVTSS	BLANK WTR		11/18/11	11/21/11	LEVEL1
WG118621-	LD		CVTSS	FRESH WTR		11/18/11	11/21/11	L54534-23
WG118621-	LD		CVTSS	GRND WTR		11/18/11	11/21/11	L54574-1
WG118621-	MB		CVTSS	BLANK WTR		11/18/11	11/21/11	MB2 111118
WG118621-	LCS		CVTSS	BLANK WTR		11/18/11	11/21/11	LEVEL1
WG118621-	LD		CVTSS	GRND WTR		11/18/11	11/21/11	L54578-3
WG118621-	LD		CVTSS	FRESH WTR		11/18/11	11/21/11	L54604-9
WG118621-	LD		CVTSS	STORM WTR		11/18/11	11/21/11	L54624-1
WG118621-	MB		CVTSS	BLANK WTR		11/18/11	11/21/11	MB3 111118
WG118621-	LCS		CVTSS	BLANK WTR		11/18/11	11/21/11	LEVEL1
WG118621-	LD		CVTSS	STORM WTR		11/18/11	11/21/11	L54661-1
WG118621-	LD		CVTSS	FRESH WTR		11/18/11	11/21/11	L54675-2
WG118621-	LD		CVTSS	STORM WTR		11/18/11	11/21/11	L54681-1
WG118621-	LD		CVTSS	STORM WTR		11/18/11	11/21/11	L54285-1
WG118621-	LD		CVTSS	STORM WTR		11/18/11	11/21/11	L54191-2

WG118621-:	LD		CVTSS	IW WTR		11/18/11	11/21/11	L54351-1
WG118621-:	MB		CVTSS	BLANK WTR		11/18/11	11/21/11	MB4 111118
WG118621-:	LCS		CVTSS	BLANK WTR		11/18/11	11/21/11	LEVEL1
WG118621-:	LD		CVTSS	FRESH WTR		11/18/11	11/21/11	L54565-1
WG118621-:	LD		CVTSS	GRND WTR		11/18/11	11/21/11	L54579-3

WG119582

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/02/12	02/02/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/02/12	02/02/12	
L54928-6	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-7	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-8	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-9	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54928-10	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	01/31/12	02/02/12	02/02/12	
L54956-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	01/31/12	02/02/12	02/02/12	
L54958-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	01/30/12	02/02/12	02/02/12	
L54958-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	01/30/12	02/02/12	02/02/12	
L54958-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	02/01/12	02/02/12	02/02/12	
L54959-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	01/30/12	02/02/12	02/02/12	
L54961-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	01/30/12	02/02/12	02/02/12	
L54963-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/01/12	02/02/12	02/02/12	
L54963-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/01/12	02/02/12	02/02/12	
L55015-1	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-2	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-3	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-4	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-5	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-6	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
L55015-7	421195-140	Lake Sawyer	CVTSS	STORM WTR	01/30/12	02/02/12	02/02/12	
WG119582-:	MB		CVTSS	BLANK WTR		02/02/12	02/02/12	MB1 2/2/12
WG119582-:	LCS		CVTSS	BLANK WTR		02/02/12	02/02/12	LEVEL1
WG119582-:	LD		CVTSS	FRESH WTR		02/02/12	02/02/12	L54928-8
WG119582-·	LD		CVTSS	GRND WTR		02/02/12	02/02/12	L54959-5
WG119582-!	MB		CVTSS	BLANK WTR		02/02/12	02/02/12	MB2 2/2/12
WG119582-(	LCS		CVTSS	BLANK WTR		02/02/12	02/02/12	LEVEL1
WG119582-'	LD		CVTSS	STORM WTR		02/02/12	02/02/12	L55015-3
WG119582-:	LD		CVTSS	STORM WTR		02/02/12	02/02/12	L54686-5

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WG119613

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/06/12	02/06/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/06/12	02/06/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	01/31/12	02/06/12	02/06/12	
L54924-6	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/02/12	02/06/12	02/06/12	
L54963-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/03/12	02/06/12	02/06/12	
L55020-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/02/12	02/06/12	02/06/12	
L55020-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/02/12	02/06/12	02/06/12	
L55020-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/02/12	02/06/12	02/06/12	
L55021-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	02/03/12	02/06/12	02/06/12	
L55022-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	02/03/12	02/06/12	02/06/12	
WG119613-:	MB		CVTSS	BLANK WTR		02/06/12	02/06/12	MB1 2/6/12
WG119613-:	LCS		CVTSS	BLANK WTR		02/06/12	02/06/12	LEVEL1
WG119613-:	LD		CVTSS	STORM WTR		02/06/12	02/06/12	L54686-1
WG119613-·	LD		CVTSS	GRND WTR		02/06/12	02/06/12	L55020-5

WG119910

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55034-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55035-1	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55035-3	421422-CFGW	SWD-CFGW Cedar Falls Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55061-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55062-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	02/24/12	02/28/12	02/29/12	
L55062-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55062-4	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	02/27/12	02/28/12	02/29/12	
L55062-5	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	02/23/12	02/28/12	02/29/12	
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55175-2	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55175-3	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
L55175-6	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	02/24/12	02/28/12	02/29/12	
WG119919-:	MB		CVTSS	BLANK WTR		02/28/12	02/29/12	MB 2/28/12
WG119919-:	LCS		CVTSS	BLANK WTR		02/28/12	02/29/12	LEVEL1
WG119919-:	LD		CVTSS	STORM WTR		02/28/12	02/29/12	L55077-6
WG119919-·	LD		CVTSS	STORM WTR		02/28/12	02/29/12	L55175-3
WG119919-!	LD		CVTSS	GRND WTR		02/28/12	02/29/12	L55062-1

LIMSView Batch Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#1)

WG120009

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54649-1	421422-CHSW-P	SWD-CHSW P Cedar Hills Surface Water Permit	CVTSS	FRESH WTR	03/05/12	03/07/12	03/07/12	
L54649-2	421422-CHSW-P	SWD-CHSW P Cedar Hills Surface Water Permit	CVTSS	FRESH WTR	03/05/12	03/07/12	03/07/12	
L54649-3	421422-CHSW-P	SWD-CHSW P Cedar Hills Surface Water Permit	CVTSS	FRESH WTR	03/05/12	03/07/12	03/07/12	
L55065-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	03/05/12	03/07/12	03/07/12	
L55065-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	03/05/12	03/07/12	03/07/12	
L55065-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/06/12	03/07/12	03/07/12	
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/05/12	03/07/12	03/07/12	
L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/05/12	03/07/12	03/07/12	
L55198-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/06/12	03/07/12	03/07/12	
L55198-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/06/12	03/07/12	03/07/12	
L55198-5	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/06/12	03/07/12	03/07/12	
L55210-1	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	03/06/12	03/07/12	03/07/12	
L55210-2	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	03/06/12	03/07/12	03/07/12	
L55210-3	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	03/06/12	03/07/12	03/07/12	
L55210-4	421195-190	Vashon Island Surface Water	CVTSS	FRESH WTR	03/06/12	03/07/12	03/07/12	
L55225-1	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	03/05/12	03/07/12	03/07/12	
L55225-3	421422-HOGW	SWD-HOGW Hobart Groundwater Quarterly	CVTSS	GRND WTR	03/05/12	03/07/12	03/07/12	
WG120009-:	MB		CVTSS	BLANK WTR		03/07/12	03/07/12	MB1 3/7/12
WG120009-:	LCS		CVTSS	BLANK WTR		03/07/12	03/07/12	LEVEL1
WG120009-:	LD		CVTSS	FRESH WTR		03/07/12	03/07/12	L54649-3
WG120009-,	LD		CVTSS	GRND WTR		03/07/12	03/07/12	L55225-3
WG120009-!	LD		CVTSS	STORM WTR		03/07/12	03/07/12	L55177-5
WG120009-(	LD		CVTSS	FRESH WTR		03/07/12	03/07/12	L55210-3

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#1)

WG118621

MB:WG118621-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG118621-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	99	99		80--120

LD:WG118621-3 L54534-23 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2.2	2.4	9		0--25

LD:WG118621-4 L54574-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	7.2	7.4	3		0--25

MB:WG118621-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG118621-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	91	91		80--120

LD:WG118621-7 L54578-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.3	2.5	mg/L	24.3	24.5	1		0--25

LD:WG118621-8 L54604-9 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	194	215	10		0--25

LD:WG118621-9 L54624-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	120	120	0		0--25

MB:WG118621-10 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG118621-11 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#1)

LD:WG118621-12 L54661-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-220 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.3	2.5	mg/L	34.8	44.8	25		0--25

LD:WG118621-13 L54675-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	19	25	27	*	0--25

LD:WG118621-14 L54681-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.3	2.5	mg/L	6.75	6	12		0--25

LD:WG118621-15 L54285-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421195-180 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.7	3.3	mg/L	27	26.7	1		0--25

LD:WG118621-16 L54191-2 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	12.4	14.2	14		0--25

LD:WG118621-17 L54351-1 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421422-ENLS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	10	20	mg/L	404	366	10		0--25

MB:WG118621-18 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG118621-19 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG118621-20 L54565-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421195-140 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	1	1			0--25

LD:WG118621-21 L54579-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CFGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

WG119582

MB:WG119582-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#1)

LCS:WG119582-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	90	90		80--120

LD:WG119582-3 L54928-8 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	14.6	14	4		0--25

LD:WG119582-4 L54959-5 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

MB:WG119582-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG119582-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	93	93		80--120

LD:WG119582-7 L55015-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421195-140 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	20.8	21.8	5		0--25

LD:WG119582-8 L54686-5 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.1	2.3	mg/L	5.68	5.68	0		0--25

WG119613

MB:WG119613-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG119613-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG119613-3 L54686-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.1	2.2	mg/L	8.89	9.56	7		0--25

LD:WG119613-4 L55020-5 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-VAGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#1)

WG119919

MB:WG119919-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG119919-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	93	93		80--120

LD:WG119919-3 L55077-6 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	102	102	1		0--25

LD:WG119919-4 L55175-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	57.2	62.6	9		0--25

LD:WG119919-5 L55062-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-HOGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

WG120009

MB:WG120009-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG120009-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	94	94		80--120

LD:WG120009-3 L54649-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-P Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	18	17.6	2		0--25

LD:WG120009-4 L55225-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-HOGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	2	2.2	10		0--25

LD:WG120009-5 L55177-5 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5.71	5.71	0		0--25

LD:WG120009-6 L55210-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421195-190 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	4.8	4.2	13		0--25

LIMSView Batch Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#2)

WG120085

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55060-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55060-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55198-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55220-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55220-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55220-4	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55223-1	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	03/12/12	03/13/12	03/13/12	
L55231-1	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	03/12/12	03/13/12	03/13/12	
L55231-2	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	03/12/12	03/13/12	03/13/12	
L55231-5	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	03/12/12	03/13/12	03/13/12	
L55231-6	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	03/12/12	03/13/12	03/13/12	
L55231-7	422027	Lab Lake Wash PBT-EPA Grant	CVTSS	STORM WTR	03/12/12	03/13/12	03/13/12	
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/10/12	03/13/12	03/19/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/10/12	03/13/12	03/13/12	
WG120085-1	MB		CVTSS	BLANK WTR		03/13/12	03/13/12	MB 3/13/12
WG120085-2	LCS		CVTSS	BLANK WTR		03/13/12	03/13/12	LEVEL1
WG120085-3	LD		CVTSS	GRND WTR		03/13/12	03/13/12	L55220-4
WG120085-4	LD		CVTSS	STORM WTR		03/13/12	03/13/12	L55283-3
WG120085-5	LD		CVTSS	STORM WTR		03/13/12	03/13/12	L55231-5

WG120274

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55194-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	FRESH WTR	03/19/12	03/22/12	03/22/12	
L55194-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	FRESH WTR	03/19/12	03/22/12	03/22/12	
L55194-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	FRESH WTR	03/19/12	03/22/12	03/22/12	
L55195-1	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	SALT WTR	03/19/12	03/22/12	03/22/12	
L55195-2	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	SALT WTR	03/19/12	03/22/12	03/22/12	
L55195-3	423589-030-1	LDWG-Water Column PCB Analysis	CVTSS	SALT WTR	03/19/12	03/22/12	03/22/12	
L55269-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/20/12	03/22/12	03/22/12	
L55269-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/20/12	03/22/12	03/22/12	
L55272-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/21/12	03/22/12	03/22/12	

L55272-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/21/12	03/22/12	03/22/12	
L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/20/12	03/22/12	03/22/12	
WG120274-1	MB		CVTSS	BLANK WTR		03/22/12	03/22/12	MB1 3/22/12
WG120274-2	LCS		CVTSS	BLANK WTR		03/22/12	03/22/12	LEVEL1
WG120274-3	LD		CVTSS	GRND WTR		03/22/12	03/22/12	L55272-1
WG120274-4	LD		CVTSS	STORM WTR		03/22/12	03/22/12	L55284-3
WG120274-5	LD		CVTSS	FRESH WTR		03/22/12	03/22/12	L55194-3
WG120274-6	LD		CVTSS	FRESH WTR		03/22/12	03/22/12	L55195-3

WG120467

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55066-1	421422-VASW	SWD-VASW Vashon Surface Water Quarterly	CVTSS	FRESH WTR	03/29/12	04/04/12	04/04/12	
L55233-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	03/30/12	04/04/12	04/04/12	
L55233-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	03/29/12	04/04/12	04/04/12	
L55233-5	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	03/29/12	04/04/12	04/04/12	
L55233-6	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	03/29/12	04/04/12	04/04/12	
L55240-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/28/12	04/04/12	04/04/12	
L55268-1	421422-CHGW-NP	SWD-CHGW-NP Cedar Hills Groundwater Non-Potable	CVTSS	GRND WTR	03/30/12	04/04/12	04/04/12	
L55270-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	04/03/12	04/04/12	04/04/12	
L55270-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	04/03/12	04/04/12	04/04/12	
L55277-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	03/28/12	04/04/12	04/04/12	
L55278-1	421422-DUSW	SWD-DUSW Duvall Surface Water Quarterly	CVTSS	FRESH WTR	03/28/12	04/04/12	04/04/12	
L55356-3	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTSS	FRESH WTR	03/29/12	04/04/12	04/04/12	
L55356-6	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTSS	FRESH WTR	03/29/12	04/04/12	04/04/12	
L55356-7	421422-VASW-2	SWD-VASW-2 Vashon Surface Water Quarterly	CVTSS	FRESH WTR	03/29/12	04/04/12	04/04/12	
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/29/12	04/04/12	04/04/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/29/12	04/04/12	04/04/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/29/12	04/04/12	04/04/12	
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	03/29/12	04/04/12	04/04/12	FREP@L55384-3
L55397-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	04/03/12	04/04/12	04/04/12	
L55397-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	04/03/12	04/04/12	04/04/12	
WG120467-1	MB		CVTSS	BLANK WTR		04/04/12	04/04/12	MB14/4/12
WG120467-2	LCS		CVTSS	BLANK WTR		04/04/12	04/04/12	LEVEL1
WG120467-3	LD		CVTSS	GRND WTR		04/04/12	04/04/12	L55240-3
WG120467-4	LD		CVTSS	FRESH WTR		04/04/12	04/04/12	L55356-7

WG120467-5	LD		CVTSS	STORM WTR		04/04/12	04/04/12	L55384-1

WG123139

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56239-1	421250ON	Ambient Offshore Water Column-North	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56239-2	421250ON	Ambient Offshore Water Column-North	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56239-3	421250ON	Ambient Offshore Water Column-North	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56341-5	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	09/18/12	09/19/12	09/19/12	
L56385-1	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-2	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-3	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-4	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-5	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-6	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-7	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-8	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-9	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-10	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-11	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-12	422019	WRIA 7 Streams Ambient Monitoring	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56392-1	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-2	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-3	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-4	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-5	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-6	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-7	421250OS	Ambient Offshore Water Column-South	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56395-1	421250ON	Ambient Offshore Water Column-North	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56395-2	421250ON	Ambient Offshore Water Column-North	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56395-3	421250ON	Ambient Offshore Water Column-North	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56430-3	421422-DUGW	SWD-DUGW Duvall Groundwater Quarterly	CVTSS	GRND WTR	09/13/12	09/19/12	09/19/12	
L56431-1	421422-ENLS	SWD-ENLS Enumclaw Wastewater Permit	CVTSS	IW WTR	09/18/12	09/19/12	09/19/12	
L56453-4	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56454-1	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56454-3	421422-HTGW	SWD-HTGW Houghton Groundwater Quarterly	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56455-1	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56455-3	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	

L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56492-4	421422-PUGW	SWD-PUGW Puyallup Groundwater Quarterly	CVTSS	GRND WTR	09/18/12	09/19/12	09/19/12	
WG123139-1	MB		CVTSS	BLANK WTR		09/19/12	09/19/12	MB1 9/19/12
WG123139-2	LCS		CVTSS	BLANK WTR		09/19/12	09/19/12	LEVEL1
WG123139-3	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56385-7
WG123139-4	LD		CVTSS	GRND WTR		09/19/12	09/19/12	L56455-3
WG123139-5	MB		CVTSS	BLANK WTR		09/19/12	09/19/12	MB2 9/19/12
WG123139-6	LCS		CVTSS	BLANK WTR		09/19/12	09/19/12	LEVEL1
WG123139-7	LD		CVTSS	IW WTR		09/19/12	09/19/12	L56431-1
WG123139-8	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56484-1
WG123139-9	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56239-3
WG123139-10	LD		CVTSS	SALT WTR		09/19/12	09/19/12	L56392-1

WG123452

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56604-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/04/12	10/08/12	10/08/12	
L56608-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/04/12	10/08/12	10/08/12	
L56613-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/04/12	10/08/12	10/08/12	
L56613-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/04/12	10/08/12	10/08/12	
L56614-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/05/12	10/08/12	10/08/12	
L56614-2	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/05/12	10/08/12	10/08/12	
L56629-1	421422-CHGW-NP	SWD-CHGW-NP Cedar Hills Groundwater Non-Potable	CVTSS	GRND WTR	10/05/12	10/08/12	10/08/12	
L56679-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	10/04/12	10/08/12	10/08/12	
L56679-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	10/04/12	10/08/12	10/08/12	
L56679-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	10/04/12	10/08/12	10/08/12	
WG123452-1	MB		CVTSS	BLANK WTR		10/08/12	10/08/12	MB 10/8/12
WG123452-2	LCS		CVTSS	BLANK WTR		10/08/12	10/08/12	LEVEL1
WG123452-3	LD		CVTSS	FRESH WTR		10/08/12	10/08/12	L56679-2
WG123452-4	LD		CVTSS	GRND WTR		10/08/12	10/08/12	L56613-2

WG123975

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	10/31/12	11/05/12	11/05/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	10/31/12	11/05/12	11/05/12	SAMP
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	10/31/12	11/05/12	11/05/12	FREP@L55434-2
L56321-9	421422-CHSW-Q	SWD-CHSW Q Cedar Hills Surface Water Quarterly	CVTSS	FRESH WTR	10/30/12	11/05/12	11/05/12	
L56452-1	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/31/12	11/05/12	11/05/12	

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L56452-4	421422-CHGW	SWD-CHGW Cedar Hills Groundwater Quarterly	CVTSS	GRND WTR	10/31/12	11/05/12	11/05/12	
L56706-5	421422-CHSW-P2	SWD-CHSW P - 2 Cedar Hills Surface Water Permit 2	CVTSS	FRESH WTR	10/30/12	11/05/12	11/05/12	
L56863-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/01/12	11/05/12	11/05/12	
L56863-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/01/12	11/05/12	11/05/12	
L56872-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/02/12	11/05/12	11/05/12	
L56879-1	421422-CHSW-P	SWD-CHSW P Cedar Hills Surface Water Permit	CVTSS	FRESH WTR	10/30/12	11/05/12	11/05/12	
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	BLANK WTR	10/31/12	11/05/12	11/05/12	Field Blank
L56887-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/01/12	11/05/12	11/05/12	
L56888-1	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/02/12	11/05/12	11/05/12	
L56888-2	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/02/12	11/05/12	11/05/12	
L56888-5	421422-VAGW	SWD-VAGW Vashon Groundwater Quarterly	CVTSS	GRND WTR	11/02/12	11/05/12	11/05/12	
WG123975-1	MB		CVTSS	BLANK WTR		11/05/12	11/05/12	MB1 121105
WG123975-2	LCS		CVTSS	BLANK WTR		11/05/12	11/05/12	LEVEL1
WG123975-3	LD		CVTSS	STORM WTR		11/05/12	11/05/12	L55434-2
WG123975-4	LD		CVTSS	FRESH WTR		11/05/12	11/05/12	L56321-9
WG123975-5	LD		CVTSS	GRND WTR		11/05/12	11/05/12	L56452-4

WG124311

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56807-1	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	11/23/12	11/26/12	11/26/12	
L56807-2	421879-210	NPDES SW Monitoring	CVTSS	STORM WTR	11/23/12	11/26/12	11/26/12	
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	11/19/12	11/26/12	11/26/12	
L57018-1	421092	West Point Grit Disposal/Hauling	CVTSS	STORM WTR	11/19/12	11/26/12	11/26/12	
L57018-2	421092	West Point Grit Disposal/Hauling	CVTSS	STORM WTR	11/19/12	11/26/12	11/26/12	
L57018-3	421092	West Point Grit Disposal/Hauling	CVTSS	STORM WTR	11/19/12	11/26/12	11/26/12	
WG124311-1	MB		CVTSS	BLANK WTR		11/26/12	11/26/12	MB 11/26/12
WG124311-2	LCS		CVTSS	BLANK WTR		11/26/12	11/26/12	LEVEL1
WG124311-3	LD		CVTSS	STORM WTR		11/26/12	11/26/12	L56994-1
WG124311-4	LD		CVTSS	STORM WTR		11/26/12	11/26/12	L56807-1
WG124311-5	LD		CVTSS	STORM WTR		11/26/12	11/26/12	L57018-3

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#2)

WG120085

MB:WG120085-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG120085-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	95	95		80--120

LD:WG120085-3 L55220-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	27.2	27.2	0		0--25

LD:WG120085-4 L55283-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	35.2	34.4	2		0--25

LD:WG120085-5 L55231-5 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:422027 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	19.6	18.4	6		0--25

WG120274

MB:WG120274-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG120274-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	97	97		80--120

LD:WG120274-3 L55272-1 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	11	11.2	2		0--25

LD:WG120274-4 L55284-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	7.2	6.2	15		0--25

LD:WG120274-5 L55194-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:423589-030-1 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	4.9	4.9	0		0--25

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LD:WG120274-6 L55195-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:423589-030-1 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	5.6	6.2			0--25

WG120467

MB:WG120467-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG120467-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	94	94		80--120

LD:WG120467-3 L55240-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	53.4	54.2	1		0--25

LD:WG120467-4 L55356-7 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-VASW-2 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	308	323	5		0--25

LD:WG120467-5 L55384-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	2	4	mg/L	66.4	69.6	5		0--25

WG123139

MB:WG123139-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123139-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	94	94		80--120

LD:WG123139-3 L56385-7 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.2	3	6		0--25

LD:WG123139-4 L56455-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	46.6	47	1		0--25

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#2)

MB:WG123139-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123139-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	87	87		80--120

LD:WG123139-7 L56431-1 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421422-ENLS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	10	20	mg/L	374	392	5		0--25

LD:WG123139-8 L56484-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.8	4.2	10		0--25

LD:WG123139-9 L56239-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5.8	7	19		0--25

LD:WG123139-10 L56392-1 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	6	6.4			0--25

WG123452

MB:WG123452-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123452-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	84	84		80--120

LD:WG123452-3 L56679-2 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5	5.2	4		0--25

LD:WG123452-4 L56613-2 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	7.4	7.4	0		0--25

LIMSView QC Report for Green River Bulk Water Storm Samples - Data Validation for TSS (#2)

WG123975

MB:WG123975-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123975-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	111	111		80--120

LD:WG123975-3 L55434-2 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	6	5.8	3		0--25

LD:WG123975-4 L56321-9 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	155	152	2		0--25

LD:WG123975-5 L56452-4 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-CHGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	75.6	76.2	1		0--25

WG124311

MB:WG124311-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG124311-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	95	95		80--120

LD:WG124311-3 L56994-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	43.6	44.6	2		0--25

LD:WG124311-4 L56807-1 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421879-210 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	73.6	69.4	6		0--25

LD:WG124311-5 L57018-3 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:421092 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1.4	2.9	mg/L	111	112	1		0--25

LIMSView Batch Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

WG117365

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L53926-1	421184-110	OCS-City of Enumclaw	MTICPMS	EFFLUENT	09/05/11	09/14/11	09/14/11	
L53926-3	421184-110	OCS-City of Enumclaw	MTICPMS	INFLUENT	09/05/11	09/14/11	09/14/11	
L54010-1	421184-100	OCS-City of Buckley	MTICPMS	EFFLUENT	09/12/11	09/14/11	09/14/11	
L54043-1	421422-VASW	SWD-VASW Vashon SW Qtrly	MTHARD-ICPMS	FRESH WTR	09/08/11	09/14/11	09/19/11	
L54043-1	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS	FRESH WTR	09/08/11	09/14/11	09/14/11	
L54043-3	421422-VASW	SWD-VASW Vashon SW Qtrly	MTHARD-ICPMS	FRESH WTR	09/08/11	09/14/11	09/19/11	
L54043-3	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS	FRESH WTR	09/08/11	09/14/11	09/14/11	
L54043-4	421422-VASW	SWD-VASW Vashon SW Qtrly	MTHARD-ICPMS	FRESH WTR	09/08/11	09/14/11	09/19/11	
L54043-4	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS	FRESH WTR	09/08/11	09/14/11	09/14/11	
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/06/11	09/14/11	09/14/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/06/11	09/14/11	09/14/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/06/11	09/14/11	09/14/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/07/11	09/14/11	09/14/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/07/11	09/14/11	09/14/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/07/11	09/14/11	09/14/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/07/11	09/14/11	09/14/11	
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/12/11	09/14/11	09/14/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/12/11	09/14/11	09/14/11	
WG117365-1	MB		MTHARD-ICPMS	BLANK WTR		09/14/11	09/19/11	METHOD BLANK
WG117365-1	MB		MTICPMS	BLANK WTR		09/14/11	09/14/11	METHOD BLANK
WG117365-2	SB		MTHARD-ICPMS	BLANK WTR		09/14/11	09/19/11	WG117365-1 MS-20
WG117365-2	SB		MTICPMS	BLANK WTR		09/14/11	09/14/11	WG117365-1 MS-20
WG117365-3	LD		MTHARD-ICPMS	FRESH WTR		09/14/11	09/19/11	L54043-1 RPD-LIQ
WG117365-3	LD		MTICPMS	FRESH WTR		09/14/11	09/14/11	L54043-1 RPD-LIQ
WG117365-4	MS		MTHARD-ICPMS	FRESH WTR		09/14/11	09/19/11	L54043-1 MS-20
WG117365-4	MS		MTICPMS	FRESH WTR		09/14/11	09/14/11	L54043-1 MS-20

WG117467

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L53996-1	423258-400	Reclaimed Water Soil Cove-GW 2011	MTHARD-ICPMS	OTHR WTR	08/16/11	09/20/11	09/27/11	
L53996-1	423258-400	Reclaimed Water Soil Cove-GW 2011	MTICPMS	OTHR WTR	08/16/11	09/20/11	09/26/11	
L53996-2	423258-400	Reclaimed Water Soil Cove-GW 2011	MTHARD-ICPMS	OTHR WTR	08/16/11	09/20/11	09/27/11	
L53996-2	423258-400	Reclaimed Water Soil Cove-GW 2011	MTICPMS	OTHR WTR	08/16/11	09/20/11	09/26/11	
L53996-3	423258-400	Reclaimed Water Soil Cove-GW 2011	MTHARD-ICPMS	OTHR WTR	08/16/11	09/20/11	09/27/11	
L53996-3	423258-400	Reclaimed Water Soil Cove-GW 2011	MTICPMS	OTHR WTR	08/16/11	09/20/11	09/26/11	
L54076-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills SW Qtrly	MTHARD-ICPMS	FRESH WTR	09/19/11	09/20/11	09/27/11	

L54076-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills SW Qtrly	MTICPMS	FRESH WTR	09/19/11	09/20/11	09/26/11	
L54106-1	421196-130	Roads Groundwater	MTICPMS	GRND WTR	09/19/11	09/20/11	09/26/11	
L54106-2	421196-130	Roads Groundwater	MTICPMS	GRND WTR	09/19/11	09/20/11	09/26/11	
L54106-3	421196-130	Roads Groundwater	MTICPMS	GRND WTR	09/19/11	09/20/11	09/26/11	
L54126-1	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	09/13/11	09/20/11	09/26/11	
L54126-3	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	09/13/11	09/20/11	09/26/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/11	09/20/11	09/26/11	
L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/11	09/20/11	09/26/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/11	09/20/11	09/26/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/11	09/20/11	09/26/11	
L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/14/11	09/20/11	09/26/11	
L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/14/11	09/20/11	09/26/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/15/11	09/20/11	09/26/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/15/11	09/20/11	09/26/11	
L54154-2	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	09/14/11	09/20/11	09/26/11	
L54154-3	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	09/14/11	09/20/11	09/26/11	
WG117467-1	MB		MTHARD-ICPMS	BLANK WTR		09/20/11	09/27/11	METHOD BLANK
WG117467-1	MB		MTICPMS	BLANK WTR		09/20/11	09/26/11	METHOD BLANK
WG117467-2	SB		MTHARD-ICPMS	BLANK WTR		09/20/11	09/27/11	WG117467-1 MS-20
WG117467-2	SB		MTICPMS	BLANK WTR		09/20/11	09/26/11	WG117467-1 MS-20
WG117467-3	LD		MTHARD-ICPMS	FRESH WTR		09/20/11	09/27/11	L54076-1 RPD-LIQ
WG117467-3	LD		MTICPMS	FRESH WTR		09/20/11	09/26/11	L54076-1 RPD-LIQ
WG117467-4	MS		MTHARD-ICPMS	FRESH WTR		09/20/11	09/27/11	L54076-1 MS-20
WG117467-4	MS		MTICPMS	FRESH WTR		09/20/11	09/26/11	L54076-1 MS-20

WG118904

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54628-1	421184-110	OCS-City of Enumclaw	MTICPMS	EFFLUENT	12/06/11	12/12/11	12/12/11	
L54628-3	421184-110	OCS-City of Enumclaw	MTICPMS	INFLUENT	12/06/11	12/12/11	12/12/11	
L54659-1	421195-260	Ravensdale Monthly GW	MTICPMS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54714-6	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/07/11	12/12/11	12/12/11	
L54714-7	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/07/11	12/12/11	12/12/11	
L54714-8	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54714-9	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54714-10	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54714-11	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/07/11	12/12/11	12/12/11	

L54714-12	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/09/11	12/12/11	12/12/11	
L54714-13	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/09/11	12/12/11	12/12/11	
L54714-14	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/09/11	12/12/11	12/12/11	
L54714-15	421196-130	Roads Groundwater	MTICPMS	GRND WTR	12/09/11	12/12/11	12/12/11	
WG118904-1	MB		MTICPMS	BLANK WTR		12/12/11	12/12/11	METHOD BLANK
WG118904-2	SB		MTICPMS	BLANK WTR		12/12/11	12/12/11	WG118904-1 MS-20
WG118904-3	LD		MTICPMS	GRND WTR		12/12/11	12/12/11	L54714-6 RPD-LIQ
WG118904-4	MS		MTICPMS	GRND WTR		12/12/11	12/12/11	L54714-6 MS-20

WG119896

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	01/31/12	02/27/12	02/27/12	
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	02/24/12	02/27/12	02/27/12	
WG119896-1	MB		MTICPMS	BLANK WTR		02/27/12	02/27/12	METHOD BLANK
WG119896-2	SB		MTICPMS	BLANK WTR		02/27/12	02/27/12	WG119896-1 MS-20
WG119896-3	LD		MTICPMS	STORM WTR		02/27/12	02/27/12	L54686-1 RPD-LIQ
WG119896-4	MS		MTICPMS	STORM WTR		02/27/12	02/27/12	L54686-1 MS-20

WG120032

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54687-1	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	01/25/12	03/08/12	03/08/12	
L54687-2	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	01/25/12	03/08/12	03/08/12	
L54687-3	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	01/25/12	03/08/12	03/08/12	
L55011-1	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55011-2	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55011-3	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55012-1	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	02/15/12	03/08/12	03/08/12	
L55012-3	423589-320-4	CSO Basin Study	MTICPMS	SEWER WTR	02/15/12	03/08/12	03/08/12	
L55157-1	421190	Accreditation	MTICPMS	FRESH WTR	02/21/12	03/08/12	03/08/12	
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/05/12	03/08/12	03/08/12	

L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/05/12	03/08/12	03/09/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55186-1	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55186-2	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55186-3	423589-320-4	CSO Basin Study	MTICPMS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55252-1	421155	Quality Assurance	MTICPMS	FRESH WTR	03/06/12	03/08/12	03/08/12	
WG120032-1	MB		MTICPMS	BLANK WTR		03/08/12	03/08/12	METHOD BLANK
WG120032-2	SB		MTICPMS	BLANK WTR		03/08/12	03/08/12	WG120032-1 MS-20
WG120032-3	LD		MTICPMS	STORM WTR		03/08/12	03/08/12	L54687-3 RPD-LIQ
WG120032-4	MS		MTICPMS	STORM WTR		03/08/12	03/08/12	L54687-3 MS-20

WG120431

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/10/12	04/02/12	04/03/12	
L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/10/12	04/02/12	04/03/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/10/12	04/02/12	04/03/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/10/12	04/02/12	04/03/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/10/12	04/02/12	04/03/12	
L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	03/29/12	04/02/12	04/03/12	FREP@L55384-3
WG120431-1	MB		MTICPMS	BLANK WTR		04/02/12	04/03/12	METHOD BLANK
WG120431-2	SB		MTICPMS	BLANK WTR		04/02/12	04/03/12	WG120431-1 MS-20
WG120431-3	LD		MTICPMS	STORM WTR		04/02/12	04/03/12	L55283-6 RPD-LIQ
WG120431-4	MS		MTICPMS	STORM WTR		04/02/12	04/03/12	L55283-6 MS-20

WG123352

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	

L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
WG123352-1	MB		MTICPMS	BLANK WTR		10/01/12	10/01/12	METHOD BLANK
WG123352-2	SB		MTICPMS	BLANK WTR		10/01/12	10/01/12	WG123352-1 MS-20
WG123352-3	LD		MTICPMS	FRESH WTR		10/01/12	10/01/12	L56484-4 RPD-LIQ
WG123352-4	MS		MTICPMS	FRESH WTR		10/01/12	10/01/12	L56484-4 MS-20

WG124307

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	10/31/12	11/26/12	11/26/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	10/31/12	11/26/12	11/26/12	SAMP
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	10/31/12	11/26/12	11/26/12	FREP@L55434-2
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	BLANK WTR	10/31/12	11/26/12	11/26/12	Field Blank
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	11/19/12	11/26/12	11/26/12	
WG124307-1	MB		MTICPMS	BLANK WTR		11/26/12	11/26/12	METHOD BLANK
WG124307-2	SB		MTICPMS	BLANK WTR		11/26/12	11/26/12	WG124307-1 MS-20
WG124307-3	LD		MTICPMS	STORM WTR		11/26/12	11/26/12	L55434-1 RPD-LIQ
WG124307-4	MS		MTICPMS	STORM WTR		11/26/12	11/26/12	L55434-1 MS-20

WG124802

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
WG124802-1	MB		MTICPMS	BLANK WTR		12/26/12	12/26/12	METHOD BLANK
WG124802-2	SB		MTICPMS	BLANK WTR		12/26/12	12/26/12	WG124802-1 MS-20
WG124802-3	LD		MTICPMS	STORM WTR		12/26/12	12/26/12	L56869-1 RPD-LIQ
WG124802-4	MS		MTICPMS	STORM WTR		12/26/12	12/26/12	L56869-1 MS-20

WG117297

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L53821-1	421422-VAGW	SWD-VAGW Vashon GW Qtrly	MTICPMS-DISS	GRND WTR	09/01/11	09/08/11	09/12/11	
L53821-2	421422-VAGW	SWD-VAGW Vashon GW Qtrly	MTICPMS-DISS	GRND WTR	09/01/11	09/08/11	09/12/11	
L53936-3	421422-DUGW	SWD-VAGW Vashon GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	

L53937-1	421422-CFSW	SWD-CFSW Cedar Falls SW Qtrly	MTICPMS-DISS	FRESH WTR	08/31/11	09/08/11	09/12/11	
L54037-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/01/11	09/08/11	09/12/11	
L54037-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	
L54043-1	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS-DISS	FRESH WTR	09/08/11	09/08/11	09/12/11	
L54043-3	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS-DISS	FRESH WTR	09/08/11	09/08/11	09/12/11	
L54043-4	421422-VASW	SWD-VASW Vashon SW Qtrly	MTICPMS-DISS	FRESH WTR	09/08/11	09/08/11	09/12/11	
L54053-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/01/11	09/08/11	09/12/11	
L54054-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	
L54054-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	
L54054-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	
L54054-5	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/02/11	09/08/11	09/12/11	
L54055-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/06/11	09/08/11	09/12/11	
L54055-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/06/11	09/08/11	09/12/11	
L54062-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/08/11	09/08/11	09/12/11	
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/06/11	09/08/11	09/12/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/06/11	09/08/11	09/12/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/06/11	09/08/11	09/12/11	
WG117297-1	MB		MTICPMS-DISS	BLANK WTR		09/08/11	09/12/11	METHOD BLANK
WG117297-2	SB		MTICPMS-DISS	BLANK WTR		09/08/11	09/12/11	WG117297-1 MS-20
WG117297-3	LD		MTICPMS-DISS	FRESH WTR		09/08/11	09/12/11	L53937-1 RPD-LIQ
WG117297-4	MS		MTICPMS-DISS	FRESH WTR		09/08/11	09/12/11	L53937-1 MS-20

WG117449

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54063-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/09/11	09/19/11	09/20/11	
L54063-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/13/11	09/19/11	09/20/11	
L54063-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/09/11	09/19/11	09/20/11	
L54065-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/12/11	09/19/11	09/20/11	
L54065-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/12/11	09/19/11	09/20/11	
L54072-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	09/12/11	09/19/11	09/20/11	
L54073-1	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/15/11	09/19/11	09/20/11	
L54073-3	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/15/11	09/19/11	09/20/11	
L54075-1	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/14/11	09/19/11	09/20/11	
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/12/11	09/19/11	09/20/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/12/11	09/19/11	09/20/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/12/11	09/19/11	09/20/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/11	09/19/11	09/20/11	
L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/11	09/19/11	09/20/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/11	09/19/11	09/20/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/11	09/19/11	09/20/11	

L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/14/11	09/19/11	09/20/11	
L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/14/11	09/19/11	09/20/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/15/11	09/19/11	09/20/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/15/11	09/19/11	09/20/11	
WG117449-1	MB		MTICPMS-DISS	BLANK WTR		09/19/11	09/20/11	METHOD BLANK
WG117449-2	SB		MTICPMS-DISS	BLANK WTR		09/19/11	09/20/11	WG117449-1 MS-20
WG117449-3	LD		MTICPMS-DISS	GRND WTR		09/19/11	09/20/11	L54073-3 RPD-LIQ
WG117449-4	MS		MTICPMS-DISS	GRND WTR		09/19/11	09/20/11	L54073-3 MS-20

WG117646

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L53871-3	421422-CFGW	SWD-CFGW Cedar Falls GW Qtrly	MTICPMS-DISS	GRND WTR	09/21/11	09/27/11	09/27/11	
L54073-4	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/21/11	09/27/11	09/27/11	
L54073-5	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/19/11	09/27/11	09/27/11	
L54075-3	421422-HTGW	SWD-HTGW Houghton GW Qtrly	MTICPMS-DISS	GRND WTR	09/21/11	09/27/11	09/27/11	
L54076-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills SW Qtrly	MTICPMS-DISS	FRESH WTR	09/19/11	09/27/11	09/27/11	
L54076-2	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	09/26/11	09/27/11	09/27/11	
L54076-3	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	09/26/11	09/27/11	09/27/11	
L54079-1	421422-CFGW	SWD-CFGW Cedar Falls GW Qtrly	MTICPMS-DISS	GRND WTR	09/21/11	09/27/11	09/27/11	
L54081-1	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	09/23/11	09/27/11	09/27/11	
L54083-1	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	09/22/11	09/27/11	09/27/11	
L54083-3	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	09/22/11	09/27/11	09/27/11	
L54084-1	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	09/26/11	09/27/11	09/27/11	
L54084-3	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	09/23/11	09/27/11	09/27/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/07/11	09/27/11	09/27/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/07/11	09/27/11	09/27/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/07/11	09/27/11	09/27/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/07/11	09/27/11	09/27/11	
L54174-2	423589-320-4	CSO Basin Study	MTICPMS-DISS	SEWER WTR	09/21/11	09/27/11	09/27/11	
WG117646-1	MB		MTICPMS-DISS	BLANK WTR		09/27/11	09/27/11	METHOD BLANK
WG117646-2	SB		MTICPMS-DISS	BLANK WTR		09/27/11	09/27/11	WG117646-1 MS-20
WG117646-3	LD		MTICPMS-DISS	FRESH WTR		09/27/11	09/27/11	L54076-2 RPD-LIQ
WG117646-4	MS		MTICPMS-DISS	FRESH WTR		09/27/11	09/27/11	L54076-2 MS-20

WG118907

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54556-1	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/05/11	12/12/11	12/12/11	
L54556-2	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/05/11	12/12/11	12/12/11	
L54556-5	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/06/11	12/12/11	12/12/11	

L54556-6	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/06/11	12/12/11	12/12/11	
L54584-4	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/05/11	12/12/11	12/12/11	
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	11/16/11	12/12/11	12/12/11	
L54703-3	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/02/11	12/12/11	12/12/11	
L54703-4	421422-HOGW	SWD-HOGW Hobart GW Qtrly	MTICPMS-DISS	GRND WTR	12/02/11	12/12/11	12/12/11	
L54705-1	421422-CHGW	SWD-CHGW Cedar Hills GW Qtrly	MTICPMS-DISS	GRND WTR	12/05/11	12/12/11	12/12/11	
L54705-3	421422-PUGW	SWD-PUGW Puyallup GW Qtrly	MTICPMS-DISS	GRND WTR	12/06/11	12/12/11	12/12/11	
L54706-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/07/11	12/12/11	12/12/11	
L54706-5	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/07/11	12/12/11	12/12/11	
L54708-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54708-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54709-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54709-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/08/11	12/12/11	12/12/11	
L54709-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	12/08/11	12/12/11	12/12/11	
WG118907-1	MB		MTICPMS-DISS	BLANK WTR		12/12/11	12/12/11	METHOD BLANK
WG118907-2	SB		MTICPMS-DISS	BLANK WTR		12/12/11	12/12/11	WG118907-1 MS-20
WG118907-3	LD		MTICPMS-DISS	GRND WTR		12/12/11	12/12/11	L54556-1 RPD-LIQ
WG118907-4	MS		MTICPMS-DISS	GRND WTR		12/12/11	12/12/11	L54556-1 MS-20

WG119904

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	01/31/12	02/27/12	02/27/12	
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	02/24/12	02/27/12	02/27/12	
L55190-1	421155	Quality Assurance	MTICPMS-DISS	FILTER WTR	02/02/12	02/27/12	02/27/12	
WG119904-1	MB		MTICPMS-DISS	BLANK WTR		02/27/12	02/27/12	METHOD BLANK
WG119904-2	SB		MTICPMS-DISS	BLANK WTR		02/27/12	02/27/12	WG119904-1 MS-20
WG119904-3	LD		MTICPMS-DISS	STORM WTR		02/27/12	02/27/12	L54686-4 RPD-LIQ
WG119904-4	MS		MTICPMS-DISS	STORM WTR		02/27/12	02/27/12	L54686-4 MS-20
WG119904-5	MB		MTICPMS-DISS	BLANK WTR		02/27/12	02/27/12	ACID BLANK FOR L55190-1

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WG120037

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54687-1	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	01/25/12	03/08/12	03/08/12	
L54687-2	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	01/25/12	03/08/12	03/08/12	
L54687-3	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	01/25/12	03/08/12	03/08/12	
L55011-1	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55011-2	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55011-3	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55012-1	423589-320-4	CSO Basin Study	MTICPMS-DISS	SEWER WTR	02/15/12	03/08/12	03/08/12	
L55012-3	423589-320-4	CSO Basin Study	MTICPMS-DISS	SEWER WTR	02/15/12	03/08/12	03/08/12	
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/05/12	03/08/12	03/08/12	
L55186-1	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55186-2	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
L55186-3	423589-320-4	CSO Basin Study	MTICPMS-DISS	STORM WTR	02/29/12	03/08/12	03/08/12	
WG120037-1	MB		MTICPMS-DISS	BLANK WTR		03/08/12	03/08/12	METHOD BLANK
WG120037-2	SB		MTICPMS-DISS	BLANK WTR		03/08/12	03/08/12	WG120037-1 MS-20
WG120037-3	LD		MTICPMS-DISS	SEWER WTR		03/08/12	03/08/12	L54687-3 RPD-LIQ
WG120037-4	MS		MTICPMS-DISS	SEWER WTR		03/08/12	03/08/12	L54687-3 MS-20

WG120089

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54928-1	421422-CHSW-Q	SWD-CHSW Q Cedar Hills SW Qtrly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55198-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55219-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/08/12	03/13/12	03/13/12	
L55220-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55220-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55220-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/09/12	03/13/12	03/13/12	
L55223-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	MTICPMS-DISS	GRND WTR	03/12/12	03/13/12	03/13/12	
L55224-1	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-2	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-3	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-4	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55224-5	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	

L55224-6	421422-CHSW-M	SWD-CHSW M Cedar Hills SW Mthly	MTICPMS-DISS	FRESH WTR	03/12/12	03/13/12	03/13/12	
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/10/12	03/13/12	03/13/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/10/12	03/13/12	03/13/12	
WG120089-1	MB		MTICPMS-DISS	BLANK WTR		03/13/12	03/13/12	METHOD BLANK
WG120089-2	SB		MTICPMS-DISS	BLANK WTR		03/13/12	03/13/12	WG120089-1 MS-20
WG120089-3	LD		MTICPMS-DISS	FRESH WTR		03/13/12	03/13/12	L54928-1 RPD-LIQ
WG120089-4	MS		MTICPMS-DISS	FRESH WTR		03/13/12	03/13/12	L54928-1 MS-20

WG120441

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/20/12	04/02/12	04/03/12	
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/29/12	04/02/12	04/03/12	
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	03/29/12	04/02/12	04/03/12	FREP@L55384-3
WG120441-1	MB		MTICPMS-DISS	BLANK WTR		04/02/12	04/03/12	METHOD BLANK
WG120441-2	SB		MTICPMS-DISS	BLANK WTR		04/02/12	04/03/12	WG120441-1 MS-20
WG120441-3	LD		MTICPMS-DISS	STORM WTR		04/02/12	04/03/12	L55384-4 RPD-LIQ
WG120441-4	MS		MTICPMS-DISS	STORM WTR		04/02/12	04/03/12	L55384-4 MS-20

WG123353

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
WG123353-1	MB		MTICPMS-DISS	BLANK WTR		10/01/12	10/01/12	METHOD BLANK
WG123353-2	SB		MTICPMS-DISS	BLANK WTR		10/01/12	10/01/12	WG123353-1 MS-20
WG123353-3	LD		MTICPMS-DISS	FRESH WTR		10/01/12	10/01/12	L56484-5 RPD-LIQ
WG123353-4	MS		MTICPMS-DISS	FRESH WTR		10/01/12	10/01/12	L56484-5 MS-20

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WG124364

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	10/31/12	11/28/12	11/28/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	10/31/12	11/28/12	11/28/12	SAMP
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	10/31/12	11/28/12	11/28/12	FREP@L55434-2
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	BLANK WTR	10/31/12	11/28/12	11/28/12	Field Blank
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	11/19/12	11/28/12	11/28/12	
WG124364-1	MB		MTICPMS-DISS	BLANK WTR		11/28/12	11/28/12	METHOD BLANK
WG124364-2	SB		MTICPMS-DISS	BLANK WTR		11/28/12	11/28/12	WG124364-1 MS-20
WG124364-3	LD		MTICPMS-DISS	STORM WTR		11/28/12	11/28/12	L55434-1 RPD-LIQ
WG124364-4	MS		MTICPMS-DISS	STORM WTR		11/28/12	11/28/12	L55434-1 MS-20

WG124836

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
WG124836-1	MB		MTICPMS-DISS	BLANK WTR		12/31/12	12/31/12	METHOD BLANK
WG124836-2	SB		MTICPMS-DISS	BLANK WTR		12/31/12	12/31/12	WG124836-1 MS-20
WG124836-3	LD		MTICPMS-DISS	STORM WTR		12/31/12	12/31/12	L56869-1 RPD-LIQ
WG124836-4	MS		MTICPMS-DISS	STORM WTR		12/31/12	12/31/12	L56869-1 MS-20

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WG117365

MB:WG117365-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	

MB:WG117365-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Total, ICP-MS	10	50	ug/L	<MDL	
Manganese, Total, ICP-MS	0.1	0.5	ug/L	0.615	B
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG117365-2 MB:WG117365-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	32.9	100		85--115

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SB:WG117365-2 MB:WG117365-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	101		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5030	101		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5100	102		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4740	95		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4780	96		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.1	96		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.3	102		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	4970	99		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	0.615	20	20.4	99		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	19	95		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.7	98		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	96		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.1	95		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.9	105		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		85--115
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	20	100		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.1	91		85--115
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.9	105		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.8	99		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		85--115

LD:WG117365-3 L54043-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	159	157	1		0--20

LD:WG117365-3 L54043-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Total, ICP-MS	100	100	ug/L	10800	10500	2		0--20
Magnesium, Total, ICP-MS	50	50	ug/L	25000	24300	3		0--20
Potassium, Total, ICP-MS	100	500	ug/L	2210	2200	1		0--20
Calcium, Total, ICP-MS	50	50	ug/L	22500	22800	1		0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	2.64	2.67	1		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	1.68	1.71	2		0--20

Iron, Total, ICP-MS	10	50	ug/L	1730	1760	1	0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	857	849	1	0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.525	0.533	1	0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	3.61	3.61	0	0--20
Copper, Total, ICP-MS	0.4	2	ug/L	1.3	1.3		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	2.1	2.2		0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	5.11	5.06	1	0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL		0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	<MDL		0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	<MDL		0--20
Barium, Total, ICP-MS	0.05	0.25	ug/L	13.2	13.6	2	0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.736	0.745	1	0--20

MS:WG117365-4 L54043-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	159	33.1	191		4xRule	75--125

MS:WG117365-4 L54043-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-VASW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.5	108		75--125
Sodium, Total, ICP-MS	100	100	ug/L	10800	5000	16100	106		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	25000	5000	29900		4xRule	75--125
Potassium, Total, ICP-MS	100	500	ug/L	2210	5000	7000	96		75--125
Calcium, Total, ICP-MS	50	50	ug/L	22500	5000	27300		4xRule	75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	2.64	20	22.5	100		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	1.68	20	22.8	105		75--125
Iron, Total, ICP-MS	10	50	ug/L	1730	5000	6500	95		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	857	20	869		4xRule	75--125
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.525	20	18.2	88		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	3.61	20	26.5	114		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	1.3	20	21.2	99		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	2.1	20	22.5	102		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	5.11	20	26.4	107		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	19.5	98		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.4	107		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.2	96		75--125

Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	17.4	87	75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	18.1	90	75--125
Barium, Total, ICP-MS	0.05	0.25	ug/L	13.2	20	35.1	109	75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.7	99	75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.736	20	20.5	99	75--125

WG117467

MB:WG117467-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	

MB:WG117467-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Total, ICP-MS	10	50	ug/L	<MDL	
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

SB:WG117467-2 MB:WG117467-1 Matrix: BLANK WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	<MDL	33.1	34.3	104		85--115

SB:WG117467-2 MB:WG117467-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103		85--115
Sodium, Total, ICP-MS	100	100	ug/L	<MDL	5000	5350	107		85--115
Magnesium, Total, ICP-MS	50	50	ug/L	<MDL	5000	5320	106		85--115
Aluminum, Total, ICP-MS	2	10	ug/L	<MDL	20	22.2	111		85--115
Potassium, Total, ICP-MS	100	500	ug/L	<MDL	5000	4960	99		85--115
Calcium, Total, ICP-MS	50	50	ug/L	<MDL	5000	4960	99		85--115
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.3	102		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	19.1	96		85--115
Iron, Total, ICP-MS	10	50	ug/L	<MDL	5000	5110	102		85--115
Manganese, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.8	104		85--115
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.5	98		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	20.1	101		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.5	98		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	99		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.3	102		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.9	105		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.6	98		85--115
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.3	102		85--115
Antimony, Total, ICP-MS	0.3	1	ug/L	<MDL	20	20.2	101		85--115
Barium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		85--115
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21	105		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	104		85--115

LD:WG117467-3 L54076-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	39.7	39	2		0--20

LD:WG117467-3 L54076-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

Sodium, Total, ICP-MS	100	100	ug/L	6430	6230	3	0--20
Magnesium, Total, ICP-MS	50	50	ug/L	3420	3380	1	0--20
Aluminum, Total, ICP-MS	2	10	ug/L	269	267	1	0--20
Potassium, Total, ICP-MS	100	500	ug/L	3320	3320	0	0--20
Calcium, Total, ICP-MS	50	50	ug/L	10300	10000	2	0--20
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.26	1.23	3	0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	0.74	0.72		0--20
Iron, Total, ICP-MS	10	50	ug/L	370	370	0	0--20
Manganese, Total, ICP-MS	0.1	0.5	ug/L	12.8	12.6	1	0--20
Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.19	0.19		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	2.73	2.74	0	0--20
Copper, Total, ICP-MS	0.4	2	ug/L	13	12.9	1	0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	34.5	33.8	2	0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.62	0.63	2	0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL		0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	<MDL		0--20
Antimony, Total, ICP-MS	0.3	1	ug/L	1.58	1.54	3	0--20
Barium, Total, ICP-MS	0.05	0.25	ug/L	13.6	13.2	2	0--20
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.912	0.914	0	0--20

MS:WG117467-4 L54076-1 Matrix: FRESH WTR Listtype:MTHARD-ICPMS Method:EPA 200.8/SW846 6020A*SM2340B Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Hardness, Calc	0.331	0.331	mg CaCO3/L	39.7	33.1	74.5	105		75--125

MS:WG117467-4 L54076-1 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		75--125
Sodium, Total, ICP-MS	100	100	ug/L	6430	5000	12200	116		75--125
Magnesium, Total, ICP-MS	50	50	ug/L	3420	5000	8740	106		75--125
Aluminum, Total, ICP-MS	2	10	ug/L	269	20	283		4xRule	75--125
Potassium, Total, ICP-MS	100	500	ug/L	3320	5000	8470	103		75--125
Calcium, Total, ICP-MS	50	50	ug/L	10300	5000	15400	103		75--125
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	1.26	20	22.5	106		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	0.74	20	20.5	99		75--125
Iron, Total, ICP-MS	10	50	ug/L	370	5000	5620	105		75--125
Manganese, Total, ICP-MS	0.1	0.5	ug/L	12.8	20	34.2	107		75--125

Cobalt, Total, ICP-MS	0.05	0.25	ug/L	0.19	20	19.9	98		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	2.73	20	24.5	109		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	13	20	35	110		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	34.5	20	54.4	99		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.62	20	21.4	104		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.4	102		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.6	108		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	100		75--125
Tin, Total, ICP-MS	0.3	1.5	ug/L	<MDL	20	19.4	97		75--125
Antimony, Total, ICP-MS	0.3	1	ug/L	1.58	20	21.8	101		75--125
Barium, Total, ICP-MS	0.05	0.25	ug/L	13.6	20	32.6	95		75--125
Thallium, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.3	107		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	0.912	20	22	106		75--125

WG118904

MB:WG118904-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG118904-2 MB:WG118904-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	21.3	106		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	22	110		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	21.8	109		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	23	115		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.5	108		85--115
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	22.3	111		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	22	110		85--115

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

LD:WG118904-3 L54714-6 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421196-130 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Chromium, Total, ICP-MS	0.2	1	ug/L	0.9	0.91			0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.893	0.918	3		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	0.56	0.58			0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.95	1.6			0--20
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.31	0.33			0--20
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG118904-4 L54714-6 Matrix: GRND WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:421196-130 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Chromium, Total, ICP-MS	0.2	1	ug/L	0.9	20	20.8	99		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	0.893	20	22.5	108		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	0.56	20	21.7	106		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	0.95	20	22.1	106		75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.31	20	20.9	103		75--125
Selenium, Total, ICP-MS	0.5	1	ug/L	<MDL	20	20.7	104		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		75--125

WG119896

MB:WG119896-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG119896-2 MB:WG119896-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103		85--115

LD:WG119896-3 L54686-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.53	0.577	8		0--20

MS:WG119896-4 L54686-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.53	20	19.9	97		75--125

WG120032

MB:WG120032-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG120032-2 MB:WG120032-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	<MDL	20	20	100		85--115
Chromium, Total, ICP-MS	0.2	1	ug/L	<MDL	20	20.6	103		85--115
Nickel, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.6	108		85--115
Copper, Total, ICP-MS	0.4	2	ug/L	<MDL	20	22	110		85--115
Zinc, Total, ICP-MS	0.5	2.5	ug/L	<MDL	20	22.7	114		85--115
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	107		85--115
Silver, Total, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.7	103		85--115
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	<MDL	20	21.3	107		85--115
Lead, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	107		85--115

LD:WG120032-3 L54687-3 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	9.73	9.73	0		0--20
Chromium, Total, ICP-MS	0.2	1	ug/L	8.59	8.7	1		0--20
Nickel, Total, ICP-MS	0.1	0.5	ug/L	9.03	8.97	1		0--20
Copper, Total, ICP-MS	0.4	2	ug/L	34.5	34.7	1		0--20
Zinc, Total, ICP-MS	0.5	2.5	ug/L	170	169	1		0--20

Arsenic, Total, ICP-MS	0.1	0.5	ug/L	2.06	2.08	1		0--20
Silver, Total, ICP-MS	0.04	0.2	ug/L	0.19	0.18			0--20
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.363	0.368	1		0--20
Lead, Total, ICP-MS	0.1	0.5	ug/L	29.7	30	1		0--20

MS:WG120032-4 L54687-3 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Vanadium, Total, ICP-MS	0.075	0.375	ug/L	9.73	20	28.7	95		75--125
Chromium, Total, ICP-MS	0.2	1	ug/L	8.59	20	28.4	99		75--125
Nickel, Total, ICP-MS	0.1	0.5	ug/L	9.03	20	29.6	103		75--125
Copper, Total, ICP-MS	0.4	2	ug/L	34.5	20	55.1	103		75--125
Zinc, Total, ICP-MS	0.5	2.5	ug/L	170	20	187		4xRule	75--125
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	2.06	20	21.8	99		75--125
Silver, Total, ICP-MS	0.04	0.2	ug/L	0.19	20	20.5	101		75--125
Cadmium, Total, ICP-MS	0.05	0.25	ug/L	0.363	20	21.2	104		75--125
Lead, Total, ICP-MS	0.1	0.5	ug/L	29.7	20	50.7	105		75--125

WG120431

MB:WG120431-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG120431-2 MB:WG120431-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.5	97		85--115

LD:WG120431-3 L55283-6 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.591	0.583	1		0--20

MS:WG120431-4 L55283-6 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.591	20	19.5	94		75--125

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

WG123352

MB:WG123352-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG123352-2 MB:WG123352-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115

LD:WG123352-3 L56484-4 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.779	0.785	1		0--20

MS:WG123352-4 L56484-4 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.779	20	19.2	92		75--125

WG124307

MB:WG124307-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG124307-2 MB:WG124307-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115

LD:WG124307-3 L55434-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.856	0.882	3		0--20

MS:WG124307-4 L55434-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.856	20	21.7	104		75--125

WG124802

MB:WG124802-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG124802-2 MB:WG124802-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115

LD:WG124802-3 L56869-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.793	0.774	2		0--20

MS:WG124802-4 L56869-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.793	20	19.7	94		75--125

WG117297

MB:WG117297-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	

Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL

SB:WG117297-2 MB:WG117297-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.9	109		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4990	100		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4980	100		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	20.3	101		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	4910	98		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4900	98		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.8	104		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.9	105		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	5030	101		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.2	101		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.9	105		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.7	103		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	20.4	102		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.6	103		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.3	102		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.2	106		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.9	100		85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.2	101		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.7	98		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.5	97		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.1	101		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

LD:WG117297-3 L53937-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFSW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	3960	4080	3		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	3080	3200	4		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	8.7	8.8			0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	410	410			0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	9030	9090	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.492	0.495	1		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.79	0.8			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.73	1.71	1		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.33	0.33			0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	0.71	0.72			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	8.25	8.39	2		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.11	0.11			0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	<MDL			0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	3.79	3.86	2		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG117297-4 L53937-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CFSW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.2	106		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	3960	5000	8630	93		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	3080	5000	7590	90		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	8.7	20	26.9	91		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	410	5000	5170	95		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	9030	5000	13800	95		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.492	20	21.5	105		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.79	20	22.2	107		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4900	98		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	1.73	20	21.7	100		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19	95		75--125

Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.33	20	20.8	102	75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	0.71	20	21.2	103	75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	8.25	20	27	94	75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.11	20	21.3	106	75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.9	105	75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.6	103	75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.3	96	75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	19.3	97	75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.1	96	75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	3.79	20	22.5	93	75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.6	98	75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96	75--125

WG117449

MB:WG117449-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

SB:WG117449-2 MB:WG117449-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.5	92		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5430	109		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	5720	114		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5500	110		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	5410	108		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.6	93		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.2	96		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4810	96		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	22.8	114		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	99		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	19.4	97		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.5	97		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	19.2	96		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.3	101		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.9	95		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.1	95		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.9	95		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.9	100		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115

LD:WG117449-3 L54073-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HTGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	7190	7150	1		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	13400	13500	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1550	1580	2		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	22300	22400	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	2.39	2.4	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.9	1.88	1		0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.4	0.3			0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	2.82	2.83	1		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	<MDL			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	<MDL			0--20

Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.34	0.34		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	0.57	<MDL		0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL		0--20
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	7.03	7.61	8	0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL		0--20

MS:WG117449-4 L54073-3 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HTGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.6	98		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	7190	5000	12400	105		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	13400	5000	19000	111		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1550	5000	7120	111		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	22300	5000	28200		4xRule	75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	2.39	20	21.1	94		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.9	20	21	96		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4690	94		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.4	20	17.5	85		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	16.9	85		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	2.82	20	24.5	109		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	21.7	109		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	19.9	99		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.34	20	21.5	106		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	0.57	20	21.6	105		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.2	101		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.3	92		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	18.7	93		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	7.03	20	25.3	92		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.2	101		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	101		75--125

WG117646

MB:WG117646-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	

Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL

SB:WG117646-2 MB:WG117646-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4840	97		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	5300	106		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	21.9	110		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5090	102		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4660	93		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	19.4	97		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19.7	98		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4870	97		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.2	96		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	20.4	102		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	21	105		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.9	100		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.6	108		85--115

Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.4	97		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	19.9	99		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.9	99		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.4	97		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.3	96		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.4	102		85--115

LD:WG117646-3 L54076-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	5240	5200	1		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	6330	6270	1		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	27.8	28.2	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1890	1890	0		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	13900	13900	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.643	0.643	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.28	0.28			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	182	181	1		0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	13.2	12.9	2		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.079	0.079			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.848	0.859	1		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.1	1.1			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	4.08	4	2		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.722	0.714	1		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	<MDL			0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	4.79	4.81	1		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

MS:WG117646-4 L54076-2 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-M Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.9	105		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	5240	5000	9970	95		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	6330	5000	12000	113		75--125

Aluminum, Dissolved, ICP-MS	2	10	ug/L	27.8	20	49.1	106	75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1890	5000	7050	103	75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	13900	5000	18400	90	75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.643	20	20.2	98	75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.28	20	20.1	99	75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	182	5000	5110	99	75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	13.2	20	32	94	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.079	20	19.4	96	75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.848	20	21	101	75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.1	20	21.8	104	75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	4.08	20	24.8	103	75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.722	20	21.3	103	75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.9	110	75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	18.4	92	75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.3	101	75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20	100	75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.4	102	75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	4.79	20	24.7	100	75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.3	97	75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103	75--125

WG118907

MB:WG118907-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	

Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL

SB:WG118907-2 MB:WG118907-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.8	99		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	4950	99		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4870	97		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5260	105		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4640	93		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.6	93		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	18.7	94		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4670	93		85--115
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	19.7	99		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20	100		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	19.6	98		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	21.6	108		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98		85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	21.9	110		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.6	103		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101		85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.4	97		85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	18.8	94		85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.3	96		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.1	96		85--115

LD:WG118907-3 L54556-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HOGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	1310	1300	1		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	1800	1790	1		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1320	1310	1		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	6880	6950	1		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	<MDL			0--20

Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	<MDL		0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL		0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	109	109	0	0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.075	0.072		0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.22	0.21		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.5	1.3		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2	<MDL		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL		0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL		0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL		0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL		0--20
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	1.52	1.53	1	0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL		0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL		0--20

MS:WG118907-4 L54556-1 Matrix: GRND WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-HOGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	100		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	1310	5000	6380	102		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	1800	5000	6800	100		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1320	5000	6680	107		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	6880	5000	11700	97		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	18.9	95		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	19	95		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4790	96		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	109	20	130		4xRule	75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	0.075	20	19.3	96		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.22	20	20.7	102		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.5	20	21.4	100		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2	20	21.9	100		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	101		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	22.7	113		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.7	103		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.5	103		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	19.6	98		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	1.52	20	20.5	95		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	19.7	99		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.4	97		75--125

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

WG119904

MB:WG119904-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG119904-2 MB:WG119904-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	101		85--115

LD:WG119904-3 L54686-4 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	0.42			0--20

MS:WG119904-4 L54686-4 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	20	21	103		75--125

MB:WG119904-5 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

WG120037

MB:WG120037-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

SB:WG120037-2 MB:WG120037-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	21	105		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	21.1	106		85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21.3	106		85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	21.3	106		85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	102		85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.1	100		85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	21.3	106		85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	21	105		85--115

LD:WG120037-3 L54687-3 Matrix: SEWER WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-320-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	1.34	1.34	0		0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.25	1.24	0		0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	1.26	1.26	0		0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	6.28	6.26	0		0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	22.5	22.2	2		0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.766	0.763	0		0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.057	0.061			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.48	0.49			0--20

MS:WG120037-4 L54687-3 Matrix: SEWER WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-320-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	1.34	20	22.1	104		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	1.25	20	22	104		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	1.26	20	22.2	105		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	6.28	20	27.2	104		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	22.5	20	42.4	99		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.766	20	21.7	105		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20	100		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	0.057	20	20.8	104		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	0.48	20	21	103		75--125

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

WG120089

MB:WG120089-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG120089-2 MB:WG120089-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	18.7	93		85--115
Sodium, Dissolved, ICP-MS	100	100	ug/L	<MDL	5000	5070	101		85--115
Magnesium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4880	98		85--115
Aluminum, Dissolved, ICP-MS	2	10	ug/L	<MDL	20	21.5	108		85--115
Potassium, Dissolved, ICP-MS	100	500	ug/L	<MDL	5000	5040	101		85--115
Calcium, Dissolved, ICP-MS	50	50	ug/L	<MDL	5000	4990	100		85--115
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	<MDL	20	20.3	101		85--115
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	<MDL	20	20.6	103		85--115
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4800	96		85--115

Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103	85--115
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.2	101	85--115
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.6	103	85--115
Copper, Dissolved, ICP-MS	0.4	2	ug/L	<MDL	20	21.9	109	85--115
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	<MDL	20	20.5	102	85--115
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	103	85--115
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	20.5	102	85--115
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.2	106	85--115
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100	85--115
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.4	102	85--115
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.1	101	85--115
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20	100	85--115
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.2	101	85--115
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.3	102	85--115

LD:WG120089-3 L54928-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20
Sodium, Dissolved, ICP-MS	100	100	ug/L	7530	7540	0		0--20
Magnesium, Dissolved, ICP-MS	50	50	ug/L	2380	2350	1		0--20
Aluminum, Dissolved, ICP-MS	2	10	ug/L	18.1	18.3	2		0--20
Potassium, Dissolved, ICP-MS	100	500	ug/L	1190	1090	9		0--20
Calcium, Dissolved, ICP-MS	50	50	ug/L	13400	13400	0		0--20
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.34	0.36			0--20
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.43	0.45			0--20
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	<MDL			0--20
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.793	0.686	14		0--20
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.32	0.31			0--20
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.3	1.4			0--20
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2	1.7			0--20
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	0.14			0--20
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	<MDL			0--20
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	<MDL			0--20
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	<MDL			0--20
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	<MDL			0--20
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	5.16	5.12	1		0--20
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	<MDL			0--20
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	<MDL			0--20

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

MS:WG120089-4 L54928-1 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:421422-CHSW-Q Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Beryllium, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	17.5	87		75--125
Sodium, Dissolved, ICP-MS	100	100	ug/L	7530	5000	12500	100		75--125
Magnesium, Dissolved, ICP-MS	50	50	ug/L	2380	5000	7310	99		75--125
Aluminum, Dissolved, ICP-MS	2	10	ug/L	18.1	20	38.8	103		75--125
Potassium, Dissolved, ICP-MS	100	500	ug/L	1190	5000	6240	101		75--125
Calcium, Dissolved, ICP-MS	50	50	ug/L	13400	5000	18800	106		75--125
Vanadium, Dissolved, ICP-MS	0.075	0.375	ug/L	0.34	20	21.2	104		75--125
Chromium, Dissolved, ICP-MS	0.2	1	ug/L	0.43	20	21.3	104		75--125
Iron, Dissolved, ICP-MS	10	50	ug/L	<MDL	5000	4910	98		75--125
Manganese, Dissolved, ICP-MS	0.1	0.5	ug/L	0.793	20	21.8	105		75--125
Cobalt, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.6	103		75--125
Nickel, Dissolved, ICP-MS	0.1	0.5	ug/L	0.32	20	21.2	104		75--125
Copper, Dissolved, ICP-MS	0.4	2	ug/L	1.3	20	23.5	111		75--125
Zinc, Dissolved, ICP-MS	0.5	2.5	ug/L	2	20	22.6	103		75--125
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.14	20	22.1	110		75--125
Selenium, Dissolved, ICP-MS	0.5	1	ug/L	<MDL	20	22.5	112		75--125
Silver, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	21.2	106		75--125
Cadmium, Dissolved, ICP-MS	0.05	0.25	ug/L	<MDL	20	20.1	101		75--125
Tin, Dissolved, ICP-MS	0.3	1.5	ug/L	<MDL	20	20.5	102		75--125
Antimony, Dissolved, ICP-MS	0.3	1	ug/L	<MDL	20	20.7	103		75--125
Barium, Dissolved, ICP-MS	0.05	0.25	ug/L	5.16	20	25.7	102		75--125
Thallium, Dissolved, ICP-MS	0.04	0.2	ug/L	<MDL	20	20.3	102		75--125
Lead, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.5	102		75--125

WG120441

MB:WG120441-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG120441-2 MB:WG120441-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115

LD:WG120441-3 L55384-4 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	0.45			0--20

MS:WG120441-4 L55384-4 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.46	20	19.7	96		75--125

WG123353

MB:WG123353-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG123353-2 MB:WG123353-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.5	98		85--115

LD:WG123353-3 L56484-5 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.663	0.671	1		0--20

MS:WG123353-4 L56484-5 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.663	20	20.7	100		75--125

WG124364

MB:WG124364-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

LIMSView QC Report for Green River Water Samples - Data Validation for Total and Dissolved Arsenic

SB:WG124364-2 MB:WG124364-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	20.1	100		85--115

LD:WG124364-3 L55434-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.864	0.848	2		0--20

MS:WG124364-4 L55434-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.864	20	20.9	100		75--125

WG124836

MB:WG124836-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG124836-2 MB:WG124836-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98		85--115

LD:WG124836-3 L56869-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.598	0.581	3		0--20

MS:WG124836-4 L56869-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.598	20	20.4	99		75--125

LIMSView Batch Report for Green River Water Samples - Data Validation for PAHs

WG117324

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54090-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/06/11	09/12/11	09/15/11	
L54090-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/06/11	09/12/11	09/15/11	
L54090-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/06/11	09/12/11	09/15/11	
L54117-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/07/11	09/12/11	09/15/11	
L54117-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/07/11	09/12/11	09/15/11	
L54117-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/07/11	09/12/11	09/15/11	
L54117-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/07/11	09/12/11	09/15/11	
WG117324-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		09/12/11	09/15/11	MB110912
WG117324-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		09/12/11	09/15/11	WG117324-1
WG117324-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		09/12/11	09/15/11	WG117324-2 WG117324-1

WG117420

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54125-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/12/11	09/16/11	09/23/11	
L54125-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/12/11	09/16/11	09/23/11	
L54125-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/12/11	09/16/11	09/23/11	
L54147-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/11	09/16/11	09/23/11	
L54147-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/11	09/16/11	09/23/11	
L54147-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/11	09/16/11	09/23/11	
L54147-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/11	09/16/11	09/23/11	
L54148-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/14/11	09/16/11	09/23/11	
L54148-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/14/11	09/16/11	09/23/11	
L54149-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/15/11	09/16/11	09/26/11	
L54149-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/15/11	09/16/11	09/26/11	
WG117420-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		09/16/11	09/23/11	MB110916
WG117420-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		09/16/11	09/23/11	WG117420-1
WG117420-3	MS		ORPAH-SIM-LVI-LL	FRESH WTR		09/16/11	09/23/11	L54125-4
WG117420-4	MSD		ORPAH-SIM-LVI-LL	FRESH WTR		09/16/11	09/23/11	WG117420-3 L54125-4

WG118646

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54681-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	11/16/11	11/22/11	12/09/11	
L54681-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	11/16/11	11/22/11	12/09/11	
L54681-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	11/16/11	11/22/11	12/09/11	
L54681-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	11/16/11	11/22/11	12/09/11	
WG118646-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		11/22/11	12/09/11	MB111122

WG118646-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		11/22/11	12/09/11	WG118646-1
WG118646-3	MS		ORPAH-SIM-LVI-LL	STORM WTR		11/22/11	12/09/11	L54681-1
WG118646-4	LD		ORPAH-SIM-LVI-LL	STORM WTR		11/22/11	12/09/11	L54681-3

WG119622

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L54686-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
L54686-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
L54686-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
L54686-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
L54686-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
L54686-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	01/31/12	02/06/12	02/17/12	
WG119622-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		02/06/12	02/17/12	MB120206
WG119622-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		02/06/12	02/17/12	WG119622-1
WG119622-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		02/06/12	02/17/12	WG119622-2 WG119622-1
WG119622-4	MS		ORPAH-SIM-LVI-LL	STORM WTR		02/06/12	02/17/12	L54686-1
WG119622-5	LD		ORPAH-SIM-LVI-LL	STORM WTR		02/06/12	02/17/12	L54686-2

WG119922

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55077-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	02/24/12	02/29/12	03/20/12	
L55077-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	02/24/12	02/29/12	03/20/12	
L55077-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	02/24/12	02/29/12	03/20/12	
L55077-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	02/24/12	02/29/12	03/20/12	
WG119922-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		02/29/12	03/20/12	MB12029
WG119922-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		02/29/12	03/20/12	WG119922-1
WG119922-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		02/29/12	03/20/12	WG119922-2 WG119922-1
WG119922-4	MS		ORPAH-SIM-LVI-LL	STORM WTR		02/29/12	03/20/12	L55077-1
WG119922-5	LD		ORPAH-SIM-LVI-LL	STORM WTR		02/29/12	03/20/12	L55077-2

WG120056

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55177-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/05/12	03/12/12	03/23/12	
L55177-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/05/12	03/12/12	03/23/12	
L55177-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/05/12	03/12/12	03/23/12	
L55177-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/05/12	03/12/12	03/23/12	
L55177-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/05/12	03/12/12	03/23/12	
L55283-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/10/12	03/12/12	03/23/12	

L55283-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/10/12	03/12/12	03/23/12	
L55283-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/10/12	03/12/12	03/23/12	
L55283-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/10/12	03/12/12	03/23/12	
L55283-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/10/12	03/12/12	03/23/12	
WG120056-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		03/12/12	03/23/12	MB120312
WG120056-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		03/12/12	03/23/12	WG120056-1
WG120056-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		03/12/12	03/23/12	WG120056-2 WG120056-1
WG120056-4	MS		ORPAH-SIM-LVI-LL	STORM WTR		03/12/12	03/23/12	L55177-1
WG120056-5	LD		ORPAH-SIM-LVI-LL	STORM WTR		03/12/12	03/23/12	L55177-2

WG120336

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55284-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
L55284-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
L55284-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
L55284-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
L55284-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
L55284-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/20/12	03/27/12	04/06/12	
WG120336-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		03/27/12	04/06/12	MB120327
WG120336-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		03/27/12	04/06/12	WG120336-1
WG120336-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		03/27/12	04/06/12	WG120336-2 WG120336-1
WG120336-4	MS		ORPAH-SIM-LVI-LL	STORM WTR		03/27/12	04/06/12	L55284-1
WG120336-5	LD		ORPAH-SIM-LVI-LL	STORM WTR		03/27/12	04/06/12	L55284-2

WG120476

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55384-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/29/12	04/04/12	04/09/12	
L55384-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/29/12	04/04/12	04/09/12	
L55384-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/29/12	04/04/12	04/09/12	
L55384-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	03/29/12	04/04/12	04/09/12	FREP@L55384-3
WG120476-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		04/04/12	04/09/12	MB120404
WG120476-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		04/04/12	04/09/12	WG120476-1
WG120476-3	MS		ORPAH-SIM-LVI-LL	STORM WTR		04/04/12	04/09/12	L55384-1
WG120476-4	MSD		ORPAH-SIM-LVI-LL	STORM WTR		04/04/12	04/09/12	WG120476-3 L55384-1

WG123089

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	

L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
WG123089-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		09/17/12	09/20/12	MB120917
WG123089-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		09/17/12	09/20/12	WG123089-1
WG123089-3	MS		ORPAH-SIM-LVI-LL	FRESH WTR		09/17/12	09/20/12	L56484-2
WG123089-4	MSD		ORPAH-SIM-LVI-LL	FRESH WTR		09/17/12	09/20/12	WG123089-3 L56484-2

WG124037

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L55434-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	10/31/12	11/07/12	11/13/12	SAMP
L55434-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	10/31/12	11/07/12	11/13/12	SAMP
L55434-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	10/31/12	11/07/12	11/13/12	FREP@L55434-2
L56881-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	BLANK WTR	10/31/12	11/07/12	11/13/12	Field Blank
WG124037-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		11/07/12	11/13/12	MB121107
WG124037-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		11/07/12	11/13/12	WG124037-1
WG124037-3	SBD		ORPAH-SIM-LVI-LL	BLANK WTR		11/07/12	11/13/12	WG124037-2 WG124037-1
WG124037-4	MS		ORPAH-SIM-LVI-LL	STORM WTR		11/07/12	11/13/12	L55434-1

WG124302

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56994-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	11/19/12	11/25/12	11/28/12	
WG124302-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		11/25/12	11/28/12	MB121125
WG124302-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		11/25/12	11/28/12	WG124302-1
WG124302-3	MS		ORPAH-SIM-LVI-LL	STORM WTR		11/25/12	11/28/12	L56994-1
WG124302-4	MSD		ORPAH-SIM-LVI-LL	STORM WTR		11/25/12	11/28/12	WG124302-3 L56994-1

WG124534

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
WG124534-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		12/10/12	12/12/12	MB121210

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WG124534-2	SB	ORPAH-SIM-LVI-LL	BLANK WTR	12/10/12	12/12/12	WG124534-1
WG124534-3	MS	ORPAH-SIM-LVI-LL	STORM WTR	12/10/12	12/12/12	L56869-2
WG124534-4	MSD	ORPAH-SIM-LVI-LL	STORM WTR	12/10/12	12/12/12	WG124534-3 L56869-2

LIMSView QC Report for Green River Water Samples - Data Validation for PAHs

WG117324

MB:WG117324-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.001	0.01	ug/L	0.0011	B
2-Methylnaphthalene	0.00061	0.0061	ug/L	0.00062	B
Acenaphthylene	0.0005	0.0041	ug/L	<MDL	
Acenaphthene	0.0003	0.003	ug/L	<MDL	
Fluorene	0.0003	0.003	ug/L	<MDL	
Phenanthrene	0.00031	0.0031	ug/L	0.0013	B
Anthracene	0.0005	0.005	ug/L	<MDL	
Fluoranthene	0.00033	0.0033	ug/L	0.0005	B
Pyrene	0.00035	0.0035	ug/L	0.00042	B
Benzo(a)anthracene	0.0005	0.005	ug/L	<MDL	
Chrysene	0.0005	0.005	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.001	0.01	ug/L	<MDL	
Benzo(a)pyrene	0.001	0.01	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.0005	0.005	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.0007	0.007	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0006	0.006	ug/L	<MDL	
Total LPAHs	0.0003	0.003	ug/L	0.0024	
Total HPAHS	0.00033	0.0033	ug/L	0.00092	

SBD:WG117324-3 SB:WG117324-2 MB:WG117324-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.001	0.01	ug/L	0.0011	0.1	0.0691	68		40--160	0.1	0.0754	74		9		0--40
2-Methylnaphthalene	0.00061	0.0061	ug/L	0.00062	0.1	0.0666	66		40--160	0.1	0.0732	73		9		0--40
Acenaphthylene	0.0005	0.0041	ug/L	<MDL	0.1	0.0822	82		40--160	0.1	0.0918	92		11		0--40
Acenaphthene	0.0003	0.003	ug/L	<MDL	0.1	0.0726	73		40--160	0.1	0.0808	81		11		0--40
Fluorene	0.0003	0.003	ug/L	<MDL	0.1	0.0757	76		40--160	0.1	0.0827	83		9		0--40
Phenanthrene	0.00031	0.0031	ug/L	0.0013	0.1	0.0764	75		40--160	0.1	0.08	79		5		0--40
Anthracene	0.0005	0.005	ug/L	<MDL	0.1	0.0717	72		40--160	0.1	0.0795	79		10		0--40
Fluoranthene	0.00033	0.0033	ug/L	0.0005	0.1	0.0906	90		40--160	0.1	0.091	91		0		0--40
Pyrene	0.00035	0.0035	ug/L	0.00042	0.1	0.0853	85		40--160	0.1	0.0915	91		7		0--40
Benzo(a)anthracene	0.0005	0.005	ug/L	<MDL	0.1	0.0943	94		40--160	0.1	0.0958	96		2		0--40
Chrysene	0.0005	0.005	ug/L	<MDL	0.1	0.0855	85		40--160	0.1	0.0875	87		2		0--40
Benzo(b,j,k)fluoranthene	0.001	0.01	ug/L	<MDL	0.2	0.197	98		40--160	0.2	0.196	98		0		0--40
Benzo(a)pyrene	0.001	0.01	ug/L	<MDL	0.1	0.0875	88		40--160	0.1	0.0871	87		0		0--40
Indeno(1,2,3-Cd)Pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0992	99		40--160	0.1	0.0951	95		4		0--40

Dibenzo(a,h)anthracene	0.0007	0.007	ug/L	<MDL	0.1	0.101	101	40--160	0.1	0.0952	95	6	0--40
Benzo(g,h,i)perylene	0.0006	0.006	ug/L	<MDL	0.1	0.0979	98	40--160	0.1	0.0945	95	3	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L54090-1	68	92
L54090-2	70	88
L54090-3	65	88
L54117-1	69	91
L54117-2	75	92
L54117-3	68	91
L54117-4	72	101
WG117324-1	77	95
WG117324-2	76	91
WG117324-3	82	94

WG117420

MB:WG117420-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0011	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00061	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00016	B
Fluorene	0.00015	0.0015	ug/L	0.00022	B
Phenanthrene	0.00016	0.00155	ug/L	0.0011	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00052	B
Pyrene	0.00018	0.00175	ug/L	0.00039	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00258	
Total HPAHS	0.00017	0.00165	ug/L	0.00091	

LIMSView QC Report for Green River Water Samples - Data Validation for PAHs

SB:WG117420-2 MB:WG117420-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0011	0.1	0.0768	76		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00061	0.1	0.074	73		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0904	90		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00016	0.1	0.0805	80		40--160
Fluorene	0.00015	0.0015	ug/L	0.00022	0.1	0.0842	84		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.0011	0.1	0.0801	79		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0761	76		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00052	0.1	0.0962	96		40--160
Pyrene	0.00018	0.00175	ug/L	0.00039	0.1	0.0954	95		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.099	99		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0895	89		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.209	105		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0879	88		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.103	103		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.106	106		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0995	100		40--160

MSD:WG117420-4 MS:WG117420-3 L54125-4 Matrix: FRESH WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0065	0.0943	0.0578	54		40--160	0.0943	0.0605	57		5		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0022	0.0943	0.052	53		40--160	0.0943	0.0478	48		8		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00025	0.0943	0.064	68		40--160	0.0943	0.0605	64		6		0--40
Acenaphthene	0.00014	0.00142	ug/L	0.0009	0.0943	0.0557	58		40--160	0.0943	0.053	55		5		0--40
Fluorene	0.00014	0.00142	ug/L	0.00092	0.0943	0.0599	63		40--160	0.0943	0.0576	60		4		0--40
Phenanthrene	0.00015	0.00146	ug/L	0.0018	0.0943	0.0669	69		40--160	0.0943	0.0618	64		8		0--40
Anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.07	74		40--160	0.0943	0.0651	69		7		0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00062	0.0943	0.0935	98		40--160	0.0943	0.087	92		7		0--40
Pyrene	0.00017	0.00165	ug/L	<MDL	0.0943	0.0853	90		40--160	0.0943	0.0758	80		12		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0999	106		40--160	0.0943	0.0944	100		6		0--40
Chrysene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0868	92		40--160	0.0943	0.0818	87		6		0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	<MDL	0.189	0.192	102		40--160	0.189	0.181	96		6		0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0981	104		40--160	0.0943	0.0924	98		6		0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.0943	0.101	107		40--160	0.0943	0.0959	102		5		0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.103	109		40--160	0.0943	0.0985	104		4		0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.0943	0.0971	103		40--160	0.0943	0.092	98		5		0--40

LIMSView QC Report for Green River Water Samples - Data Validation for PAHs

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L54125-1	58	101
L54125-3	56	102
L54125-4	59	101
L54147-1	62	103
L54147-2	60	102
L54147-3	60	101
L54147-4	63	103
L54148-1	61	101
L54148-2	61	103
L54149-1	68	103
L54149-2	68	102
WG117420-1	83	104
WG117420-2	88	102
WG117420-3	61	103
WG117420-4	54	96

WG118646

MB:WG118646-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0011	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00052	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00027	B
Fluorene	0.00015	0.0015	ug/L	0.00021	B
Phenanthrene	0.00016	0.00155	ug/L	0.0014	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00064	B
Pyrene	0.00018	0.00175	ug/L	0.00054	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00298	
Total HPAHS	0.00017	0.00165	ug/L	0.00118	

LIMSView QC Report for Green River Water Samples - Data Validation for PAHs

SB:WG118646-2 MB:WG118646-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0011	0.1	0.069	68		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00052	0.1	0.0639	63		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0713	71		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00027	0.1	0.0648	64		40--160
Fluorene	0.00015	0.0015	ug/L	0.00021	0.1	0.0703	70		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.0014	0.1	0.0655	64		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0592	59		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00064	0.1	0.0929	92		40--160
Pyrene	0.00018	0.00175	ug/L	0.00054	0.1	0.0854	85		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0922	92		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0822	82		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.197	99		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0843	84		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0995	99		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.104	104		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0962	96		40--160

MS:WG118646-3 L54681-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0287	0.0943	0.0777	52		40--160
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00715	0.0943	0.0695	66		40--160
Acenaphthylene	0.00024	0.00193	ug/L	0.0016	0.0943	0.0719	75		40--160
Acenaphthene	0.00014	0.00142	ug/L	0.00506	0.0943	0.0601	58		40--160
Fluorene	0.00014	0.00142	ug/L	0.00252	0.0943	0.0656	67		40--160
Phenanthrene	0.00015	0.00146	ug/L	0.00682	0.0943	0.0703	67		40--160
Anthracene	0.00024	0.00236	ug/L	0.0016	0.0943	0.0705	73		40--160
Fluoranthene	0.00016	0.00156	ug/L	0.0147	0.0943	0.106	97		40--160
Pyrene	0.00017	0.00165	ug/L	0.0149	0.0943	0.091	81		40--160
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00329	0.0943	0.0879	90		40--160
Chrysene	0.00024	0.00236	ug/L	0.00888	0.0943	0.0822	78		40--160
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.013	0.189	0.177	87		40--160
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.00492	0.0943	0.0878	88		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00466	0.0943	0.0871	87		40--160
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	0.0011	0.0943	0.0891	93		40--160
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00676	0.0943	0.0835	81		40--160

LD:WG118646-4 L54681-3 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.071	0.119	50	*	0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0032	0.00301	6		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.0011	0.00084			0--40
Acenaphthene	0.00014	0.00142	ug/L	0.0014	0.0014			0--40
Fluorene	0.00014	0.00142	ug/L	0.0013	0.001			0--40
Phenanthrene	0.00015	0.00146	ug/L	0.0026	0.00254	2		0--40
Anthracene	0.00024	0.00236	ug/L	0.0016	0.00063			0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00308	0.00349	13		0--40
Pyrene	0.00017	0.00165	ug/L	0.00243	0.00266	9		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00071	0.0008			0--40
Chrysene	0.00024	0.00236	ug/L	0.0013	0.0016			0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0017	0.0022			0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.00075	0.0011			0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00052	0.00083			0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	<MDL			0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00073	0.0011			0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L54681-1	65	96
L54681-2	63	100
L54681-3	63	93
L54681-4	62	100
WG118646-1	84	107
WG118646-2	81	101
WG118646-3	78	97
WG118646-4	70	98

WG119622

MB:WG119622-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.00505	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0028	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00054	B
Fluorene	0.00015	0.0015	ug/L	0.00063	B

Phenanthrene	0.00016	0.00155	ug/L	0.00223	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00058	B
Pyrene	0.00018	0.00175	ug/L	0.0007	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00845	
Total HPAHS	0.00017	0.00165	ug/L	0.00128	

SBD:WG119622-3 SB:WG119622-2 MB:WG119622-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.00505	0.1	0.0874	82		40--160	0.1	0.0854	80		2		0--40
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0028	0.1	0.111	108		40--160	0.1	0.107	105		3		0--40
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0883	88		40--160	0.1	0.0835	84		6		0--40
Acenaphthene	0.00015	0.0015	ug/L	0.00054	0.1	0.0942	94		40--160	0.1	0.0925	92		2		0--40
Fluorene	0.00015	0.0015	ug/L	0.00063	0.1	0.0874	87		40--160	0.1	0.0848	84		3		0--40
Phenanthrene	0.00016	0.00155	ug/L	0.00223	0.1	0.0921	90		40--160	0.1	0.0919	90		0		0--40
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0706	71		40--160	0.1	0.0663	66		6		0--40
Fluoranthene	0.00017	0.00165	ug/L	0.00058	0.1	0.0932	93		40--160	0.1	0.0945	94		1		0--40
Pyrene	0.00018	0.00175	ug/L	0.0007	0.1	0.128	127		40--160	0.1	0.129	129		1		0--40
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0969	97		40--160	0.1	0.0964	96		1		0--40
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0968	97		40--160	0.1	0.0976	98		1		0--40
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.189	94		40--160	0.2	0.191	95		1		0--40
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0718	72		40--160	0.1	0.0678	68		6		0--40
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.086	86		40--160	0.1	0.0867	87		1		0--40
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0889	89		40--160	0.1	0.0896	90		1		0--40
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.087	87		40--160	0.1	0.0879	88		1		0--40

MS:WG119622-4 L54686-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00048	0.00476	ug/L	0.0372	0.0952	0.0898	55		40--160
2-Methylnaphthalene	0.00029	0.0029	ug/L	0.00444	0.0952	0.0844	84		40--160
Acenaphthylene	0.00024	0.00195	ug/L	0.00066	0.0952	0.0679	71		40--160
Acenaphthene	0.00014	0.00143	ug/L	0.00079	0.0952	0.0682	71		40--160

Fluorene	0.00014	0.00143	ug/L	0.0011	0.0952	0.0763	79		40--160
Phenanthrene	0.00015	0.00148	ug/L	0.00332	0.0952	0.0797	80		40--160
Anthracene	0.00024	0.00238	ug/L	0.00046	0.0952	0.0647	67		40--160
Fluoranthene	0.00016	0.00157	ug/L	0.0013	0.0952	0.0931	96		40--160
Pyrene	0.00017	0.00167	ug/L	0.0016	0.0952	0.159	165	*	40--160
Benzo(a)anthracene	0.00024	0.00238	ug/L	<MDL	0.0952	0.0912	96		40--160
Chrysene	0.00024	0.00238	ug/L	0.00045	0.0952	0.0906	95		40--160
Benzo(b,j,k)fluoranthene	0.00048	0.00476	ug/L	0.0008	0.19	0.15	78		40--160
Benzo(a)pyrene	0.00048	0.00476	ug/L	<MDL	0.0952	0.0627	66		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00238	ug/L	<MDL	0.0952	0.0595	62		40--160
Dibenzo(a,h)anthracene	0.00033	0.00333	ug/L	<MDL	0.0952	0.0597	63		40--160
Benzo(g,h,i)perylene	0.00029	0.00286	ug/L	<MDL	0.0952	0.062	65		40--160

LD:WG119622-5 L54686-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0587	0.0176	108	*	0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00606	0.00566	7		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.0011	0.0011			0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00156	0.00147	5		0--40
Fluorene	0.00014	0.00142	ug/L	0.00162	0.0014	17		0--40
Phenanthrene	0.00015	0.00146	ug/L	0.0047	0.00359	27		0--40
Anthracene	0.00024	0.00236	ug/L	0.001	0.00055			0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00198	0.00204	3		0--40
Pyrene	0.00017	0.00165	ug/L	0.00261	0.00285	9		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00035	0.00036			0--40
Chrysene	0.00024	0.00236	ug/L	0.00078	0.00066			0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0011	0.0013			0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	<MDL			0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.00026			0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	<MDL			0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.00032			0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L54686-1	70	140
L54686-2	94	145
L54686-3	93	143
L54686-4	93	138
L54686-5	95	137
L54686-6	97	141

WG119622-1	83	119
WG119622-2	87	121
WG119622-3	85	122
WG119622-4	71	147
WG119622-5	86	141

WG119922

MB:WG119922-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0012	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00056	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00016	B
Fluorene	0.00015	0.0015	ug/L	0.00018	B
Phenanthrene	0.00016	0.00155	ug/L	0.0012	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00045	B
Pyrene	0.00018	0.00175	ug/L	0.00044	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00274	
Total HPAHS	0.00017	0.00165	ug/L	0.00089	

SBD:WG119922-3 SB:WG119922-2 MB:WG119922-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0012	0.1	0.0644	63		40--160	0.1	0.076	75		17		0--40
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00056	0.1	0.0626	62		40--160	0.1	0.0756	75		19		0--40
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0837	84		40--160	0.1	0.0949	95		13		0--40
Acenaphthene	0.00015	0.0015	ug/L	0.00016	0.1	0.0738	74		40--160	0.1	0.0834	83		12		0--40
Fluorene	0.00015	0.0015	ug/L	0.00018	0.1	0.0886	88		40--160	0.1	0.1	100		12		0--40
Phenanthrene	0.00016	0.00155	ug/L	0.0012	0.1	0.077	76		40--160	0.1	0.0842	83		9		0--40
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0694	69		40--160	0.1	0.0781	78		12		0--40
Fluoranthene	0.00017	0.00165	ug/L	0.00045	0.1	0.0995	99		40--160	0.1	0.105	104		5		0--40

Pyrene	0.00018	0.00175	ug/L	0.00044	0.1	0.106	106	40--160	0.1	0.111	111	4	0--40
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0927	93	40--160	0.1	0.1	100	8	0--40
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0886	89	40--160	0.1	0.0943	94	6	0--40
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.183	91	40--160	0.2	0.195	98	7	0--40
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.074	74	40--160	0.1	0.0791	79	7	0--40
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0954	95	40--160	0.1	0.103	103	7	0--40
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.097	97	40--160	0.1	0.104	104	7	0--40
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0961	96	40--160	0.1	0.103	103	7	0--40

MS:WG119922-4 L55077-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0501	0.0943	0.0666	17	*	40--160
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0019	0.0943	0.0669	69		40--160
Acenaphthylene	0.00024	0.00193	ug/L	0.00054	0.0943	0.0837	88		40--160
Acenaphthene	0.00014	0.00142	ug/L	0.00046	0.0943	0.0696	73		40--160
Fluorene	0.00014	0.00142	ug/L	0.00067	0.0943	0.0906	95		40--160
Phenanthrene	0.00015	0.00146	ug/L	0.00209	0.0943	0.0714	73		40--160
Anthracene	0.00024	0.00236	ug/L	0.00028	0.0943	0.0754	80		40--160
Fluoranthene	0.00016	0.00156	ug/L	0.0012	0.0943	0.0911	95		40--160
Pyrene	0.00017	0.00165	ug/L	0.00099	0.0943	0.1	105		40--160
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0913	97		40--160
Chrysene	0.00024	0.00236	ug/L	0.00043	0.0943	0.0844	89		40--160
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.00053	0.189	0.16	85		40--160
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0798	85		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00026	0.0943	0.0813	86		40--160
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0819	87		40--160
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00029	0.0943	0.0854	90		40--160

LD:WG119922-5 L55077-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0446	0.00847	136	*	0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0025	0.0025			0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00079	0.0014			0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00085	0.0023	92	*	0--40
Fluorene	0.00014	0.00142	ug/L	0.0008	0.00219	93	*	0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00198	0.016	156	*	0--40
Anthracene	0.00024	0.00236	ug/L	0.00034	0.0048	174	*	0--40
Fluoranthene	0.00016	0.00156	ug/L	0.0015	0.0238	176	*	0--40
Pyrene	0.00017	0.00165	ug/L	0.0013	0.0285	182	*	0--40

Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0127	200	*	0--40
Chrysene	0.00024	0.00236	ug/L	0.00041	0.0134	188	*	0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	<MDL	0.0158	200	*	0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.00988	200	*	0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00032	0.00508	176	*	0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0015			0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00038	0.00562	175	*	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L55077-1	73	136
L55077-2	74	131
L55077-4	72	122
L55077-6	79	130
WG119922-1	71	131
WG119922-2	61	120
WG119922-3	77	125
WG119922-4	69	122
WG119922-5	82	124

WG120056

MB:WG120056-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.00087	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00041	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	<MDL	
Fluorene	0.00015	0.0015	ug/L	<MDL	
Phenanthrene	0.00016	0.00155	ug/L	0.001	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00035	B
Pyrene	0.00018	0.00175	ug/L	0.00033	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	

Total LPAHs	0.00015	0.0015	ug/L	0.00187
Total HPAHS	0.00017	0.00165	ug/L	0.00068

SBD:WG120056-3 SB:WG120056-2 MB:WG120056-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.00087	0.1	0.0784	78		40--160	0.1	0.0806	80		3		0--40
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00041	0.1	0.0798	79		40--160	0.1	0.0807	80		1		0--40
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0978	98		40--160	0.1	0.101	101		3		0--40
Acenaphthene	0.00015	0.0015	ug/L	<MDL	0.1	0.0826	83		40--160	0.1	0.0852	85		3		0--40
Fluorene	0.00015	0.0015	ug/L	<MDL	0.1	0.0926	93		40--160	0.1	0.0931	93		0		0--40
Phenanthrene	0.00016	0.00155	ug/L	0.001	0.1	0.0862	85		40--160	0.1	0.0874	86		1		0--40
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0802	80		40--160	0.1	0.0818	82		2		0--40
Fluoranthene	0.00017	0.00165	ug/L	0.00035	0.1	0.102	102		40--160	0.1	0.0994	99		3		0--40
Pyrene	0.00018	0.00175	ug/L	0.00033	0.1	0.111	111		40--160	0.1	0.116	115		4		0--40
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.103	103		40--160	0.1	0.0985	99		5		0--40
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0967	97		40--160	0.1	0.094	94		3		0--40
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.211	105		40--160	0.2	0.203	102		4		0--40
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0966	97		40--160	0.1	0.0916	92		5		0--40
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0925	93		40--160	0.1	0.0893	89		4		0--40
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0935	93		40--160	0.1	0.0898	90		4		0--40
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0909	91		40--160	0.1	0.0873	87		4		0--40

MS:WG120056-4 L55177-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0676	0.0943	0.113	48		40--160
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0016	0.0943	0.0686	71		40--160
Acenaphthylene	0.00024	0.00193	ug/L	0.00039	0.0943	0.0838	88		40--160
Acenaphthene	0.00014	0.00142	ug/L	0.00033	0.0943	0.0682	72		40--160
Fluorene	0.00014	0.00142	ug/L	0.00047	0.0943	0.0829	87		40--160
Phenanthrene	0.00015	0.00146	ug/L	0.0014	0.0943	0.0712	74		40--160
Anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0739	78		40--160
Fluoranthene	0.00016	0.00156	ug/L	0.00083	0.0943	0.0927	97		40--160
Pyrene	0.00017	0.00165	ug/L	0.0007	0.0943	0.101	107		40--160
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.088	93		40--160
Chrysene	0.00024	0.00236	ug/L	0.00035	0.0943	0.0807	85		40--160
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.00055	0.189	0.155	82		40--160
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0751	80		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0564	60		40--160
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0563	60		40--160

Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.0943	0.0566	60	40--160

LD:WG120056-5 L55177-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.00664	0.0641	162	*	0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.002	0.0023			0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00067	0.00064			0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00077	0.0008			0--40
Fluorene	0.00014	0.00142	ug/L	0.00075	0.00087			0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00194	0.00175	11		0--40
Anthracene	0.00024	0.00236	ug/L	0.00048	0.00045			0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00159	0.0015	8		0--40
Pyrene	0.00017	0.00165	ug/L	0.0012	0.0012			0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00024	0.00035			0--40
Chrysene	0.00024	0.00236	ug/L	0.00048	0.00053			0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.00082	0.00095			0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	<MDL			0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00028	<MDL			0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	<MDL			0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00034	<MDL			0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L55177-1	79	122
L55177-2	81	128
L55177-4	85	119
L55177-5	65	116
L55177-6	84	114
L55283-1	72	103
L55283-2	74	103
L55283-3	83	132
L55283-4	89	128
L55283-6	94	126
WG120056-1	70	88
WG120056-2	78	107
WG120056-3	86	115
WG120056-4	68	104
WG120056-5	86	131

LIMSView QC Report for Green River Water Samples - Data Validation for PAHs

WG120336

MB:WG120336-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0019	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0012	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.0002	B
Fluorene	0.00015	0.0015	ug/L	0.00022	B
Phenanthrene	0.00016	0.00155	ug/L	0.0013	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00048	B
Pyrene	0.00018	0.00175	ug/L	0.00048	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00362	
Total HPAHS	0.00017	0.00165	ug/L	0.00096	

SBD:WG120336-3 SB:WG120336-2 MB:WG120336-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0019	0.1	0.0828	81		40--160	0.1	0.0868	85		5		0--40
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0012	0.1	0.0985	97		40--160	0.1	0.103	102		5		0--40
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0862	86		40--160	0.1	0.093	93		8		0--40
Acenaphthene	0.00015	0.0015	ug/L	0.0002	0.1	0.0894	89		40--160	0.1	0.0944	94		5		0--40
Fluorene	0.00015	0.0015	ug/L	0.00022	0.1	0.103	103		40--160	0.1	0.108	108		4		0--40
Phenanthrene	0.00016	0.00155	ug/L	0.0013	0.1	0.0835	82		40--160	0.1	0.0873	86		4		0--40
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0832	83		40--160	0.1	0.0882	88		6		0--40
Fluoranthene	0.00017	0.00165	ug/L	0.00048	0.1	0.0904	90		40--160	0.1	0.0945	94		4		0--40
Pyrene	0.00018	0.00175	ug/L	0.00048	0.1	0.103	102		40--160	0.1	0.111	111		8		0--40
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0969	97		40--160	0.1	0.103	103		6		0--40
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.094	94		40--160	0.1	0.0992	99		5		0--40
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.184	92		40--160	0.2	0.193	97		5		0--40
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0746	75		40--160	0.1	0.0814	81		9		0--40
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.089	89		40--160	0.1	0.0949	95		6		0--40

Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0977	98	40--160	0.1	0.104	104	7	0--40
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0809	81	40--160	0.1	0.0865	87	7	0--40

MS:WG120336-4 L55284-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0039	0.0943	0.0625	62		40--160
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.002	0.0943	0.0752	78		40--160
Acenaphthylene	0.00024	0.00193	ug/L	<MDL	0.0943	0.0772	82		40--160
Acenaphthene	0.00014	0.00142	ug/L	0.00033	0.0943	0.0715	75		40--160
Fluorene	0.00014	0.00142	ug/L	0.00067	0.0943	0.089	94		40--160
Phenanthrene	0.00015	0.00146	ug/L	0.00227	0.0943	0.0808	83		40--160
Anthracene	0.00024	0.00236	ug/L	0.00069	0.0943	0.0877	92		40--160
Fluoranthene	0.00016	0.00156	ug/L	0.0011	0.0943	0.0916	96		40--160
Pyrene	0.00017	0.00165	ug/L	<MDL	0.0943	0.103	110		40--160
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0999	106		40--160
Chrysene	0.00024	0.00236	ug/L	0.00047	0.0943	0.0935	99		40--160
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.00053	0.189	0.158	83		40--160
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0729	77		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0663	70		40--160
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0717	76		40--160
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.0943	0.0628	67		40--160

LD:WG120336-5 L55284-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0043	0.0174	121	*	0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0028	0.0026			0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00059	0.00061			0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00072	0.0007			0--40
Fluorene	0.00014	0.00142	ug/L	0.00067	0.00075			0--40
Phenanthrene	0.00015	0.00146	ug/L	0.0016	0.00167	4		0--40
Anthracene	0.00024	0.00236	ug/L	0.0004	0.00065			0--40
Fluoranthene	0.00016	0.00156	ug/L	0.0012	0.0014			0--40
Pyrene	0.00017	0.00165	ug/L	0.0011	0.0013			0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0003			0--40
Chrysene	0.00024	0.00236	ug/L	0.00043	0.00049			0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	<MDL	0.00063			0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	<MDL			0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	<MDL			0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	<MDL			0--40

Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	<MDL	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L55284-1	80	118
L55284-2	104	125
L55284-3	114	120
L55284-4	101	125
L55284-5	88	111
L55284-6	108	117
WG120336-1	108	118
WG120336-2	108	109
WG120336-3	114	117
WG120336-4	85	120
WG120336-5	85	120

WG120476

MB:WG120476-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0011	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00076	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00023	B
Fluorene	0.00015	0.0015	ug/L	0.00031	B
Phenanthrene	0.00016	0.00155	ug/L	0.0013	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00048	B
Pyrene	0.00018	0.00175	ug/L	0.00047	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00294	
Total HPAHS	0.00017	0.00165	ug/L	0.00095	

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SB:WG120476-2 MB:WG120476-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0011	0.1	0.0788	78		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.00076	0.1	0.0922	91		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0841	84		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00023	0.1	0.0869	87		40--160
Fluorene	0.00015	0.0015	ug/L	0.00031	0.1	0.0936	93		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.0013	0.1	0.0814	80		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0756	76		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00048	0.1	0.0853	85		40--160
Pyrene	0.00018	0.00175	ug/L	0.00047	0.1	0.101	100		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0952	95		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0925	93		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.187	94		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0747	75		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0873	87		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.096	96		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0796	80		40--160

MSD:WG120476-4 MS:WG120476-3 L55384-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0278	0.0943	0.0978	74		40--160	0.0943	0.0769	52		24		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00398	0.0943	0.0723	72		40--160	0.0943	0.0715	72		1		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.001	0.0943	0.0773	81		40--160	0.0943	0.0753	79		3		0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00172	0.0943	0.0721	75		40--160	0.0943	0.071	73		2		0--40
Fluorene	0.00014	0.00142	ug/L	0.00182	0.0943	0.0844	87		40--160	0.0943	0.0853	89		1		0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00462	0.0943	0.0758	75		40--160	0.0943	0.0806	81		6		0--40
Anthracene	0.00024	0.00236	ug/L	0.0016	0.0943	0.081	84		40--160	0.0943	0.0846	88		4		0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00459	0.0943	0.0907	91		40--160	0.0943	0.0916	92		1		0--40
Pyrene	0.00017	0.00165	ug/L	0.00533	0.0943	0.101	102		40--160	0.0943	0.106	106		4		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00092	0.0943	0.0933	98		40--160	0.0943	0.0946	99		1		0--40
Chrysene	0.00024	0.00236	ug/L	0.00319	0.0943	0.0895	92		40--160	0.0943	0.0906	93		1		0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0038	0.189	0.155	80		40--160	0.189	0.154	80		1		0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.0012	0.0943	0.0711	74		40--160	0.0943	0.0701	73		1		0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.0012	0.0943	0.0652	68		40--160	0.0943	0.0662	69		1		0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	0.00033	0.0943	0.0706	75		40--160	0.0943	0.0715	75		1		0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.0015	0.0943	0.062	64		40--160	0.0943	0.0628	65		1		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L55384-1	91	107
L55384-2	81	108
L55384-3	103	123
L55384-4	113	125
WG120476-1	102	109
WG120476-2	102	105
WG120476-3	96	108
WG120476-4	90	113

WG123089

MB:WG123089-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0023	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0016	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00037	B
Fluorene	0.00015	0.0015	ug/L	0.00048	B
Phenanthrene	0.00016	0.00155	ug/L	0.00166	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00051	B
Pyrene	0.00018	0.00175	ug/L	0.00043	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00481	
Total HPAHS	0.00017	0.00165	ug/L	0.00094	

SB:WG123089-2 MB:WG123089-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0023	0.1	0.0507	48		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0016	0.1	0.0576	56		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0668	67		40--160

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Acenaphthene	0.00015	0.0015	ug/L	0.00037	0.1	0.054	54		40--160
Fluorene	0.00015	0.0015	ug/L	0.00048	0.1	0.0638	63		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.00166	0.1	0.0619	60		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0573	57		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00051	0.1	0.0797	79		40--160
Pyrene	0.00018	0.00175	ug/L	0.00043	0.1	0.1	100		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.103	103		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.095	95		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.197	99		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0802	80		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0942	94		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0955	96		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0916	92		40--160

MSD:WG123089-4 MS:WG123089-3 L56484-2 Matrix: FRESH WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0109	0.0943	0.0565	48		40--160	0.0952	0.0464	37	*	20		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00362	0.0943	0.0496	49		40--160	0.0952	0.0495	48		0		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00048	0.0943	0.0584	61		40--160	0.0952	0.0611	64		5		0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00218	0.0943	0.048	49		40--160	0.0952	0.0507	51		6		0--40
Fluorene	0.00014	0.00142	ug/L	0.0013	0.0943	0.0577	60		40--160	0.0952	0.0618	63		7		0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00294	0.0943	0.0575	58		40--160	0.0952	0.0648	65		12		0--40
Anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0589	62		40--160	0.0952	0.0641	67		9		0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00096	0.0943	0.0733	77		40--160	0.0952	0.0812	84		10		0--40
Pyrene	0.00017	0.00165	ug/L	0.00068	0.0943	0.0897	94		40--160	0.0952	0.107	111		17		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0888	94		40--160	0.0952	0.0938	99		5		0--40
Chrysene	0.00024	0.00236	ug/L	0.00028	0.0943	0.0795	84		40--160	0.0952	0.0845	88		6		0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	<MDL	0.189	0.162	86		40--160	0.19	0.162	85		0		0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0783	83		40--160	0.0952	0.0745	78		5		0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0738	78		40--160	0.0952	0.0679	71		8		0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0734	78		40--160	0.0952	0.0674	71		9		0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.0943	0.0719	76		40--160	0.0952	0.067	70		7		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L56484-1	53	119
L56484-2	51	108
L56484-3	52	100
L56484-4	64	103
L56484-5	69	104

L56484-6	66	100
WG123089-1	46	85
WG123089-2	49	95
WG123089-3	46	89
WG123089-4	46	102

WG124037

MB:WG124037-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0018	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0011	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00015	B
Fluorene	0.00015	0.0015	ug/L	0.0002	B
Phenanthrene	0.00016	0.00155	ug/L	0.0015	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00061	B
Pyrene	0.00018	0.00175	ug/L	0.00056	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00365	
Total HPAHS	0.00017	0.00165	ug/L	0.00117	

SBD:WG124037-3 SB:WG124037-2 MB:WG124037-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spiked Blank Duplicate, Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit	TrueValue	SBD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0018	0.1	0.0725	71		40--160	0.1	0.0756	74		4		0--40
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0011	0.1	0.0906	89		40--160	0.1	0.0893	88		1		0--40
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.104	104		40--160	0.1	0.111	111		7		0--40
Acenaphthene	0.00015	0.0015	ug/L	0.00015	0.1	0.0802	80		40--160	0.1	0.0857	86		7		0--40
Fluorene	0.00015	0.0015	ug/L	0.0002	0.1	0.0929	93		40--160	0.1	0.0983	98		6		0--40
Phenanthrene	0.00016	0.00155	ug/L	0.0015	0.1	0.0832	82		40--160	0.1	0.0888	87		7		0--40
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0777	78		40--160	0.1	0.0856	86		10		0--40
Fluoranthene	0.00017	0.00165	ug/L	0.00061	0.1	0.0904	90		40--160	0.1	0.0922	92		2		0--40

Pyrene	0.00018	0.00175	ug/L	0.00056	0.1	0.116	115	40--160	0.1	0.113	112	3	0--40
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.104	104	40--160	0.1	0.105	105	2	0--40
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.0942	94	40--160	0.1	0.0955	95	1	0--40
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.201	100	40--160	0.2	0.207	103	3	0--40
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0893	89	40--160	0.1	0.0939	94	5	0--40
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0886	89	40--160	0.1	0.091	91	3	0--40
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0859	86	40--160	0.1	0.0876	88	2	0--40
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0903	90	40--160	0.1	0.0936	94	4	0--40

MS:WG124037-4 L55434-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0321	0.0943	0.0883	60		40--160
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00313	0.0943	0.0677	68		40--160
Acenaphthylene	0.00024	0.00193	ug/L	<MDL	0.0943	0.0898	95		40--160
Acenaphthene	0.00014	0.00142	ug/L	<MDL	0.0943	0.0674	71		40--160
Fluorene	0.00014	0.00142	ug/L	0.0012	0.0943	0.0833	87		40--160
Phenanthrene	0.00015	0.00146	ug/L	0.00317	0.0943	0.0803	82		40--160
Anthracene	0.00024	0.00236	ug/L	0.0016	0.0943	0.0856	89		40--160
Fluoranthene	0.00016	0.00156	ug/L	0.00249	0.0943	0.0872	90		40--160
Pyrene	0.00017	0.00165	ug/L	0.00257	0.0943	0.0953	98		40--160
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00052	0.0943	0.0945	100		40--160
Chrysene	0.00024	0.00236	ug/L	0.0015	0.0943	0.0855	89		40--160
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0019	0.189	0.169	89		40--160
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.0005	0.0943	0.0836	88		40--160
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00051	0.0943	0.0708	75		40--160
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0678	72		40--160
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00063	0.0943	0.07	74		40--160

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L55434-1	63	91
L55434-2	60	92
L55434-3	62	91
L56881-1	53	103
WG124037-1	68	97
WG124037-2	70	97
WG124037-3	77	94
WG124037-4	66	92

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WG124302

MB:WG124302-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0025	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0014	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00019	B
Fluorene	0.00015	0.0015	ug/L	0.0003	B
Phenanthrene	0.00016	0.00155	ug/L	0.00174	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.0007	B
Pyrene	0.00018	0.00175	ug/L	0.00056	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	0.00026	B
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	0.00064	B
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	0.00038	B
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	0.00039	B
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	0.00034	B
Total LPAHs	0.00015	0.0015	ug/L	0.00473	
Total HPAHS	0.00017	0.00165	ug/L	0.00327	

SB:WG124302-2 MB:WG124302-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0025	0.1	0.0736	71		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0014	0.1	0.0754	74		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.105	105		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00019	0.1	0.0821	82		40--160
Fluorene	0.00015	0.0015	ug/L	0.0003	0.1	0.0924	92		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.00174	0.1	0.0866	85		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0956	96		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.0007	0.1	0.109	108		40--160
Pyrene	0.00018	0.00175	ug/L	0.00056	0.1	0.093	92		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.104	104		40--160
Chrysene	0.00025	0.0025	ug/L	0.00026	0.1	0.0982	98		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	0.00064	0.2	0.245	122		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.122	122		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	0.00038	0.1	0.133	133		40--160

Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	0.00039	0.1	0.136	136		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	0.00034	0.1	0.121	121		40--160

MSD:WG124302-4 MS:WG124302-3 L56994-1 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.00482	0.0943	0.0537	52		40--160	0.0943	0.0608	59		12		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.0019	0.0943	0.0509	52		40--160	0.0943	0.0512	52		1		0--40
Acenaphthylene	0.00024	0.00193	ug/L	<MDL	0.0943	0.0759	80		40--160	0.0943	0.0758	80		0		0--40
Acenaphthene	0.00014	0.00142	ug/L	0.00047	0.0943	0.0581	61		40--160	0.0943	0.0577	61		1		0--40
Fluorene	0.00014	0.00142	ug/L	0.0007	0.0943	0.0728	76		40--160	0.0943	0.0728	76		0		0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00267	0.0943	0.0805	83		40--160	0.0943	0.0809	83		0		0--40
Anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0844	89		40--160	0.0943	0.0838	89		1		0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00204	0.0943	0.0998	104		40--160	0.0943	0.0843	87		17		0--40
Pyrene	0.00017	0.00165	ug/L	0.0013	0.0943	0.0844	88		40--160	0.0943	0.0717	75		16		0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.00048	0.0943	0.0911	96		40--160	0.0943	0.0877	92		4		0--40
Chrysene	0.00024	0.00236	ug/L	0.0006	0.0943	0.0874	92		40--160	0.0943	0.0849	89		3		0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0019	0.189	0.213	112		40--160	0.189	0.2	105		6		0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.00071	0.0943	0.112	118		40--160	0.0943	0.105	110		7		0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00055	0.0943	0.111	117		40--160	0.0943	0.0999	105		11		0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	0.00064	0.0943	0.108	114		40--160	0.0943	0.0933	98		14		0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00049	0.0943	0.0924	97		40--160	0.0943	0.0806	85		14		0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L56994-1	50	83
WG124302-1	77	97
WG124302-2	78	99
WG124302-3	61	90
WG124302-4	61	81

WG124534

MB:WG124534-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.003	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0011	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00022	B
Fluorene	0.00015	0.0015	ug/L	0.00027	B

Phenanthrene	0.00016	0.00155	ug/L	0.0015	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00071	B
Pyrene	0.00018	0.00175	ug/L	0.00064	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	0.00028	B
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00499	
Total HPAHS	0.00017	0.00165	ug/L	0.00163	

SB:WG124534-2 MB:WG124534-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.003	0.1	0.0349	32	*	40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0011	0.1	0.0345	33	*	40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0833	83		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00022	0.1	0.0578	58		40--160
Fluorene	0.00015	0.0015	ug/L	0.00027	0.1	0.0798	80		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.0015	0.1	0.0825	81		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0879	88		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00071	0.1	0.105	104		40--160
Pyrene	0.00018	0.00175	ug/L	0.00064	0.1	0.0993	99		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	0.00028	0.1	0.0965	96		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.106	106		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.261	130		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.128	128		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.128	128		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.126	126		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.114	114		40--160

MSD:WG124534-4 MS:WG124534-3 L56869-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0121	0.0943	0.0654	57		40--160	0.0943	0.0686	60		5		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00807	0.0943	0.0635	59		40--160	0.0943	0.0675	63		6		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00081	0.0943	0.0786	82		40--160	0.0943	0.0821	86		4		0--40
Acenaphthene	0.00014	0.00142	ug/L	0.0012	0.0943	0.0606	63		40--160	0.0943	0.0629	65		4		0--40

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Fluorene	0.00014	0.00142	ug/L	0.0014	0.0943	0.0729	76	40--160	0.0943	0.0762	79	4	0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00515	0.0943	0.0802	80	40--160	0.0943	0.0782	77	2	0--40
Anthracene	0.00024	0.00236	ug/L	0.00091	0.0943	0.0909	95	40--160	0.0943	0.0869	91	5	0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00762	0.0943	0.117	116	40--160	0.0943	0.116	115	1	0--40
Pyrene	0.00017	0.00165	ug/L	0.00596	0.0943	0.0962	96	40--160	0.0943	0.0925	92	4	0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	0.0019	0.0943	0.102	106	40--160	0.0943	0.0998	104	2	0--40
Chrysene	0.00024	0.00236	ug/L	0.00349	0.0943	0.104	107	40--160	0.0943	0.105	108	1	0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	0.0084	0.189	0.254	130	40--160	0.189	0.255	131	0	0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	0.0035	0.0943	0.132	136	40--160	0.0943	0.134	139	2	0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	0.00379	0.0943	0.128	132	40--160	0.0943	0.134	138	4	0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	0.00093	0.0943	0.114	119	40--160	0.0943	0.126	133	10	0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	0.00428	0.0943	0.113	115	40--160	0.0943	0.118	121	5	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L56869-1	50	102
L56869-2	56	95
L56869-3	51	103
L56869-4	59	109
L56869-5	54	100
L56869-6	59	94
WG124534-1	68	129
WG124534-2	31 *	103
WG124534-3	49	108
WG124534-4	52	108

LIMSView Batch Report for Green River Ingetrated Water Samples - Data Validation for All Parameters

WG123061

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56427-4	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/07/12	09/13/12	09/13/12	
L56427-5	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/07/12	09/14/12	09/14/12	
L56428-1	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56428-3	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/07/12	09/13/12	09/13/12	
L56428-4	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56430-1	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/10/12	09/13/12	09/13/12	
L56430-3	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56430-4	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTOC	GRND WTR	09/11/12	09/13/12	09/13/12	
L56432-1	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTOC	GRND WTR	09/12/12	09/13/12	09/13/12	
L56432-3	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56453-1	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTOC	GRND WTR	09/13/12	09/13/12	09/13/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/13/12	09/13/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	FRESH WTR	09/13/12	09/13/12	09/14/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	FRESH WTR	09/13/12	09/14/12	09/14/12	
WG123061-1	MB		CVTOC	BLANK WTR		09/13/12	09/13/12	MB1 120913
WG123061-2	LCS		CVTOC	BLANK WTR		09/13/12	09/13/12	LEVEL1
WG123061-3	SB		CVTOC	BLANK WTR		09/13/12	09/13/12	WG123061-1
WG123061-4	MS		CVTOC	GRND WTR		09/13/12	09/13/12	L56428-1
WG123061-5	LD		CVTOC	FRESH WTR		09/13/12	09/13/12	L56484-4
WG123061-6	MS		CVTOC	FRESH WTR		09/13/12	09/13/12	L56484-5
WG123061-7	MB		CVDOC	BLANK WTR		09/13/12	09/14/12	MB1 120913
WG123061-8	LCS		CVDOC	BLANK WTR		09/14/12	09/14/12	LEVEL1
WG123061-9	SB		CVDOC	BLANK WTR		09/13/12	09/14/12	WG123061-7
WG123061-10	LD		CVDOC	FRESH WTR		09/13/12	09/14/12	L56484-3
WG123061-11	MS		CVDOC	FRESH WTR		09/13/12	09/14/12	L56484-4
WG123061-12	LD		CVTOC	GRND WTR		09/14/12	09/14/12	L56427-5

LIMSView Batch Report for Green River Ingetrated Water Samples - Data Validation for All Parameters

WG123139

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56239-1	421250ON	Ambient Offshore	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56239-2	421250ON	Ambient Offshore	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56239-3	421250ON	Ambient Offshore	CVTSS	FRESH WTR	09/17/12	09/19/12	09/19/12	
L56341-5	421422-PUGW	SWD-PUGW Puyallup GW Qtr	CVTSS	GRND WTR	09/18/12	09/19/12	09/19/12	
L56385-1	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-2	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-3	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-4	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-5	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-6	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-7	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-8	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-9	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-10	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-11	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56385-12	422019	WRIA 7 Streams	CVTSS	FRESH WTR	09/18/12	09/19/12	09/19/12	
L56392-1	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-2	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-3	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-4	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-5	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-6	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56392-7	421250OS	Ambient Offshore	CVTSS	SALT WTR	09/18/12	09/19/12	09/19/12	
L56395-1	421250ON	Ambient Offshore	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56395-2	421250ON	Ambient Offshore	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56395-3	421250ON	Ambient Offshore	CVTSS	SALT WTR	09/17/12	09/19/12	09/19/12	
L56430-3	421422-DUGW	SWD-DUGW Duvall GW Qtr	CVTSS	GRND WTR	09/13/12	09/19/12	09/19/12	
L56431-1	421422-ENLS	SWD-ENLS Enumclaw WW Permit	CVTSS	IW WTR	09/18/12	09/19/12	09/19/12	
L56453-4	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56454-1	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56454-3	421422-HTGW	SWD-HTGW Houghton GW Qtr	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56455-1	421422-PUGW	SWD-PUGW Puyallup GW Qtr	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56455-3	421422-PUGW	SWD-PUGW Puyallup GW Qtr	CVTSS	GRND WTR	09/17/12	09/19/12	09/19/12	
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	

L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	FRESH WTR	09/13/12	09/19/12	09/19/12	
L56492-4	421422-PUGW	SWD-PUGW Puyallup GW Qtr	CVTSS	GRND WTR	09/18/12	09/19/12	09/19/12	
WG123139-1	MB		CVTSS	BLANK WTR		09/19/12	09/19/12	MB1 9/19/12
WG123139-2	LCS		CVTSS	BLANK WTR		09/19/12	09/19/12	LEVEL1
WG123139-3	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56385-7
WG123139-4	LD		CVTSS	GRND WTR		09/19/12	09/19/12	L56455-3
WG123139-5	MB		CVTSS	BLANK WTR		09/19/12	09/19/12	MB2 9/19/12
WG123139-6	LCS		CVTSS	BLANK WTR		09/19/12	09/19/12	LEVEL1
WG123139-7	LD		CVTSS	IW WTR		09/19/12	09/19/12	L56431-1
WG123139-8	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56484-1
WG123139-9	LD		CVTSS	FRESH WTR		09/19/12	09/19/12	L56239-3
WG123139-10	LD		CVTSS	SALT WTR		09/19/12	09/19/12	L56392-1

WG123352

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	FRESH WTR	09/13/12	10/01/12	10/01/12	
WG123352-1	MB		MTICPMS	BLANK WTR		10/01/12	10/01/12	METHOD BLANK
WG123352-2	SB		MTICPMS	BLANK WTR		10/01/12	10/01/12	WG123352-1 MS-20
WG123352-3	LD		MTICPMS	FRESH WTR		10/01/12	10/01/12	L56484-4 RPD-LIQ
WG123352-4	MS		MTICPMS	FRESH WTR		10/01/12	10/01/12	L56484-4 MS-20

WG123353

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	FRESH WTR	09/13/12	10/01/12	10/01/12	
WG123353-1	MB		MTICPMS-DISS	BLANK WTR		10/01/12	10/01/12	METHOD BLANK
WG123353-2	SB		MTICPMS-DISS	BLANK WTR		10/01/12	10/01/12	WG123353-1 MS-20
WG123353-3	LD		MTICPMS-DISS	FRESH WTR		10/01/12	10/01/12	L56484-5 RPD-LIQ
WG123353-4	MS		MTICPMS-DISS	FRESH WTR		10/01/12	10/01/12	L56484-5 MS-20

LIMSView Batch Report for Green River Ingetrated Water Samples - Data Validation for All Parameters

WG123089

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56484-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
L56484-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	FRESH WTR	09/13/12	09/17/12	09/20/12	
WG123089-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		09/17/12	09/20/12	MB120917
WG123089-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		09/17/12	09/20/12	WG123089-1
WG123089-3	MS		ORPAH-SIM-LVI-LL	FRESH WTR		09/17/12	09/20/12	L56484-2
WG123089-4	MSD		ORPAH-SIM-LVI-LL	FRESH WTR		09/17/12	09/20/12	WG123089-3 L56484-2

LIMSView QC Report for Green River Integrated Water Samples - Data Validation for All Parameters

WG123061

MB:WG123061-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG123061-2 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.73	97		85--115

SB:WG123061-3 MB:WG123061-1 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	9.26	93		80--120

MS:WG123061-4 L56428-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-HTGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.08	10	11.2	101		75--125

LD:WG123061-5 L56484-4 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.47	2.35	5		0--20

MS:WG123061-6 L56484-5 Matrix: FRESH WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	2.39	10	12.6	102		75--125

MB:WG123061-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG123061-8 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.74	97		85--115

LIMSView QC Report for Green River Integrated Water Samples - Data Validation for All Parameters

SB:WG123061-9 MB:WG123061-7 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.8	108		80--120

LD:WG123061-10 L56484-3 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	2.02	1.87	8		0--20

MS:WG123061-11 L56484-4 Matrix: FRESH WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	1.93	10	12.5	106		75--125

LD:WG123061-12 L56427-5 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.09	1.01	8		0--20

WG123139

MB:WG123139-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123139-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	94	94		80--120

LD:WG123139-3 L56385-7 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:422019 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.2	3	6		0--25

LD:WG123139-4 L56455-3 Matrix: GRND WTR Listtype:CVTSS Method:SM2540-D Project:421422-PUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	46.6	47	1		0--25

MB:WG123139-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG123139-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	87	87		80--120

LD:WG123139-7 L56431-1 Matrix: IW WTR Listtype:CVTSS Method:SM2540-D Project:421422-ENLS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	10	20	mg/L	374	392	5		0--25

LD:WG123139-8 L56484-1 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	3.8	4.2	10		0--25

LD:WG123139-9 L56239-3 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421250ON Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	5.8	7	19		0--25

LD:WG123139-10 L56392-1 Matrix: SALT WTR Listtype:CVTSS Method:SM2540-D Project:421250OS Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	20	mg/L	6	6.4			0--25

WG123352

MB:WG123352-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG123352-2 MB:WG123352-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.3	97		85--115

LD:WG123352-3 L56484-4 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.779	0.785	1		0--20

MS:WG123352-4 L56484-4 Matrix: FRESH WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.779	20	19.2	92		75--125

WG123353

MB:WG123353-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG123353-2 MB:WG123353-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.5	98		85--115

LD:WG123353-3 L56484-5 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.663	0.671	1		0--20

MS:WG123353-4 L56484-5 Matrix: FRESH WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.663	20	20.7	100		75--125

WG123089

MB:WG123089-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	0.0005	0.005	ug/L	0.0023	B
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0016	B
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	
Acenaphthene	0.00015	0.0015	ug/L	0.00037	B

Fluorene	0.00015	0.0015	ug/L	0.00048	B
Phenanthrene	0.00016	0.00155	ug/L	0.00166	B
Anthracene	0.00025	0.0025	ug/L	<MDL	
Fluoranthene	0.00017	0.00165	ug/L	0.00051	B
Pyrene	0.00018	0.00175	ug/L	0.00043	B
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	
Chrysene	0.00025	0.0025	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	
Total LPAHs	0.00015	0.0015	ug/L	0.00481	
Total HPAHS	0.00017	0.00165	ug/L	0.00094	

SB:WG123089-2 MB:WG123089-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	0.0005	0.005	ug/L	0.0023	0.1	0.0507	48		40--160
2-Methylnaphthalene	0.00031	0.00305	ug/L	0.0016	0.1	0.0576	56		40--160
Acenaphthylene	0.00025	0.00205	ug/L	<MDL	0.1	0.0668	67		40--160
Acenaphthene	0.00015	0.0015	ug/L	0.00037	0.1	0.054	54		40--160
Fluorene	0.00015	0.0015	ug/L	0.00048	0.1	0.0638	63		40--160
Phenanthrene	0.00016	0.00155	ug/L	0.00166	0.1	0.0619	60		40--160
Anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.0573	57		40--160
Fluoranthene	0.00017	0.00165	ug/L	0.00051	0.1	0.0797	79		40--160
Pyrene	0.00018	0.00175	ug/L	0.00043	0.1	0.1	100		40--160
Benzo(a)anthracene	0.00025	0.0025	ug/L	<MDL	0.1	0.103	103		40--160
Chrysene	0.00025	0.0025	ug/L	<MDL	0.1	0.095	95		40--160
Benzo(b,j,k)fluoranthene	0.0005	0.005	ug/L	<MDL	0.2	0.197	99		40--160
Benzo(a)pyrene	0.0005	0.005	ug/L	<MDL	0.1	0.0802	80		40--160
Indeno(1,2,3-Cd)Pyrene	0.00025	0.0025	ug/L	<MDL	0.1	0.0942	94		40--160
Dibenzo(a,h)anthracene	0.00035	0.0035	ug/L	<MDL	0.1	0.0955	96		40--160
Benzo(g,h,i)perylene	0.0003	0.003	ug/L	<MDL	0.1	0.0916	92		40--160

MSD:WG123089-4 MS:WG123089-3 L56484-2 Matrix: FRESH WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	0.00047	0.00472	ug/L	0.0109	0.0943	0.0565	48		40--160	0.0952	0.0464	37	*	20		0--40
2-Methylnaphthalene	0.00029	0.00288	ug/L	0.00362	0.0943	0.0496	49		40--160	0.0952	0.0495	48		0		0--40
Acenaphthylene	0.00024	0.00193	ug/L	0.00048	0.0943	0.0584	61		40--160	0.0952	0.0611	64		5		0--40

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Acenaphthene	0.00014	0.00142	ug/L	0.00218	0.0943	0.048	49	40--160	0.0952	0.0507	51	6	0--40
Fluorene	0.00014	0.00142	ug/L	0.0013	0.0943	0.0577	60	40--160	0.0952	0.0618	63	7	0--40
Phenanthrene	0.00015	0.00146	ug/L	0.00294	0.0943	0.0575	58	40--160	0.0952	0.0648	65	12	0--40
Anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0589	62	40--160	0.0952	0.0641	67	9	0--40
Fluoranthene	0.00016	0.00156	ug/L	0.00096	0.0943	0.0733	77	40--160	0.0952	0.0812	84	10	0--40
Pyrene	0.00017	0.00165	ug/L	0.00068	0.0943	0.0897	94	40--160	0.0952	0.107	111	17	0--40
Benzo(a)anthracene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0888	94	40--160	0.0952	0.0938	99	5	0--40
Chrysene	0.00024	0.00236	ug/L	0.00028	0.0943	0.0795	84	40--160	0.0952	0.0845	88	6	0--40
Benzo(b,j,k)fluoranthene	0.00047	0.00472	ug/L	<MDL	0.189	0.162	86	40--160	0.19	0.162	85	0	0--40
Benzo(a)pyrene	0.00047	0.00472	ug/L	<MDL	0.0943	0.0783	83	40--160	0.0952	0.0745	78	5	0--40
Indeno(1,2,3-Cd)Pyrene	0.00024	0.00236	ug/L	<MDL	0.0943	0.0738	78	40--160	0.0952	0.0679	71	8	0--40
Dibenzo(a,h)anthracene	0.00033	0.0033	ug/L	<MDL	0.0943	0.0734	78	40--160	0.0952	0.0674	71	9	0--40
Benzo(g,h,i)perylene	0.00028	0.00283	ug/L	<MDL	0.0943	0.0719	76	40--160	0.0952	0.067	70	7	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L56484-1	53	119
L56484-2	51	108
L56484-3	52	100
L56484-4	64	103
L56484-5	69	104
L56484-6	66	100
WG123089-1	46	85
WG123089-2	49	95
WG123089-3	46	89
WG123089-4	46	102

LIMSView Batch Report for Green River Integrated Water Samples - Data Validation for Storm Samples

WG124541

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	CVDOC	STORM WTR	12/03/12	12/03/12	12/05/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTOC	STORM WTR	12/03/12	12/05/12	12/05/12	
L56898-2	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/03/12	12/06/12	12/06/12	
L56923-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/03/12	12/06/12	12/06/12	
L56923-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/03/12	12/06/12	12/06/12	
L56925-1	421422-CFGW	SWD-CFGW Cedar Falls GW Qtrly	CVTOC	GRND WTR	12/03/12	12/06/12	12/06/12	
L56925-3	421422-CFGW	SWD-CFGW Cedar Falls GW Qtrly	CVTOC	GRND WTR	12/03/12	12/06/12	12/06/12	
L56936-1	421422-CFGW	SWD-CFGW Cedar Falls GW Qtrly	CVTOC	GRND WTR	12/04/12	12/05/12	12/05/12	
L57052-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/04/12	12/05/12	12/05/12	
L57052-3	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/04/12	12/05/12	12/05/12	
L57053-4	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/05/12	12/06/12	12/06/12	
L57054-1	421422-DUGW	SWD-DUGW Duvall GW Qtrly	CVTOC	GRND WTR	12/05/12	12/06/12	12/06/12	
WG124541-1	MB		CVDOC	BLANK WTR		12/03/12	12/05/12	MB1 121203
WG124541-2	LCS		CVDOC	BLANK WTR		12/05/12	12/05/12	LEVEL1
WG124541-3	SB		CVDOC	BLANK WTR		12/03/12	12/05/12	WG124541-1
WG124541-4	LD		CVDOC	STORM WTR		12/03/12	12/05/12	L56869-2
WG124541-5	MS		CVDOC	STORM WTR		12/03/12	12/05/12	L56869-5
WG124541-6	MB		CVTOC	BLANK WTR		12/05/12	12/05/12	MB1 121205
WG124541-7	LCS		CVTOC	BLANK WTR		12/05/12	12/05/12	LEVEL1
WG124541-8	SB		CVTOC	BLANK WTR		12/05/12	12/05/12	WG124541-6
WG124541-9	LD		CVTOC	STORM WTR		12/05/12	12/05/12	L56869-3
WG124541-10	MS		CVTOC	STORM WTR		12/05/12	12/05/12	L56869-5
WG124541-11	LD		CVTOC	GRND WTR		12/06/12	12/06/12	L56923-1
WG124541-12	MS		CVTOC	GRND WTR		12/06/12	12/06/12	L56925-3

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WG124465

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	CVTSS	STORM WTR	12/03/12	12/04/12	12/05/12	
L56979-1	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-2	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-3	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-4	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-5	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-6	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-8	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-9	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-10	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-11	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-12	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-13	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-14	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-15	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-16	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-17	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-19	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-20	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-21	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-22	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-23	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-25	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-26	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-27	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-29	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-30	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-31	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-32	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-33	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/28/12	12/04/12	12/05/12	
L56979-37	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-38	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-39	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	

L56979-40	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-41	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-42	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-44	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-45	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-46	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-47	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-48	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
L56979-49	421235	MAJOR LAKES (wtr col)	CVTSS	FRESH WTR	11/27/12	12/04/12	12/05/12	
WG124465-1	MB		CVTSS	BLANK WTR		12/04/12	12/05/12	MB1 121204
WG124465-2	LCS		CVTSS	BLANK WTR		12/04/12	12/05/12	LEVEL1
WG124465-3	LD		CVTSS	FRESH WTR		12/04/12	12/05/12	L56979-13
WG124465-4	MB		CVTSS	BLANK WTR		12/04/12	12/05/12	MB2 121204
WG124465-5	LCS		CVTSS	BLANK WTR		12/04/12	12/05/12	LEVEL1
WG124465-6	MB		CVTSS	BLANK WTR		12/04/12	12/05/12	MB2 121204
WG124465-7	LCS		CVTSS	BLANK WTR		12/04/12	12/05/12	LEVEL1
WG124465-8	LD		CVTSS	STORM WTR		12/04/12	12/05/12	L56869-6

WG124802

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS	STORM WTR	12/03/12	12/26/12	12/26/12	
WG124802-1	MB		MTICPMS	BLANK WTR		12/26/12	12/26/12	METHOD BLANK
WG124802-2	SB		MTICPMS	BLANK WTR		12/26/12	12/26/12	WG124802-1 MS-20
WG124802-3	LD		MTICPMS	STORM WTR		12/26/12	12/26/12	L56869-1 RPD-LIQ
WG124802-4	MS		MTICPMS	STORM WTR		12/26/12	12/26/12	L56869-1 MS-20

WG124836

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	MTICPMS-DISS	STORM WTR	12/03/12	12/31/12	12/31/12	

WG124836-1	MB		MTICPMS-DISS	BLANK WTR		12/31/12	12/31/12	METHOD BLANK
WG124836-2	SB		MTICPMS-DISS	BLANK WTR		12/31/12	12/31/12	WG124836-1 MS-20
WG124836-3	LD		MTICPMS-DISS	STORM WTR		12/31/12	12/31/12	L56869-1 RPD-LIQ
WG124836-4	MS		MTICPMS-DISS	STORM WTR		12/31/12	12/31/12	L56869-1 MS-20

WG124534

Sample	Project	Project Description	List Type	Matrix	Collect Date	Prep Date	Analysis Date	Comments
L56869-1	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-2	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-3	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-4	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-5	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
L56869-6	423589-330-4	Green Rvr PCB/PAH Loading	ORPAH-SIM-LVI-LL	STORM WTR	12/03/12	12/10/12	12/12/12	
WG124534-1	MB		ORPAH-SIM-LVI-LL	BLANK WTR		12/10/12	12/12/12	MB121210
WG124534-2	SB		ORPAH-SIM-LVI-LL	BLANK WTR		12/10/12	12/12/12	WG124534-1
WG124534-3	MS		ORPAH-SIM-LVI-LL	STORM WTR		12/10/12	12/12/12	L56869-2
WG124534-4	MSD		ORPAH-SIM-LVI-LL	STORM WTR		12/10/12	12/12/12	WG124534-3 L56869-2

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WG124541

MB:WG124541-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124541-2 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	10	9.88	99		85--115

SB:WG124541-3 MB:WG124541-1 Matrix: BLANK WTR Listtype:CVDOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

LD:WG124541-4 L56869-2 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.5	3.77	7		0--20

MS:WG124541-5 L56869-5 Matrix: STORM WTR Listtype:CVDOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Dissolved Organic Carbon	0.5	1	mg/L	3.57	10	13.5	99		75--125

MB:WG124541-6 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Organic Carbon	0.5	1	mg/L	<MDL	

LCS:WG124541-7 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	10	9.92	99		85--115

SB:WG124541-8 MB:WG124541-6 Matrix: BLANK WTR Listtype:CVTOC Method:SM5310-B Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	<MDL	10	10.2	102		80--120

LD:WG124541-9 L56869-3 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.08	3.98	2		0--20

MS:WG124541-10 L56869-5 Matrix: STORM WTR Listtype:CVTOC Method:SM5310-B Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	4.51	10	14.5	100		75--125

LD:WG124541-11 L56923-1 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-DUGW Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.24	1.28	3		0--20

MS:WG124541-12 L56925-3 Matrix: GRND WTR Listtype:CVTOC Method:SM5310-B Project:421422-CFGW Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Total Organic Carbon	0.5	1	mg/L	1.13	10	12.1	109		75--125

WG124465

MB:WG124465-1 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG124465-2 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	92	92		80--120

LD:WG124465-3 L56979-13 Matrix: FRESH WTR Listtype:CVTSS Method:SM2540-D Project:421235 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	<MDL	<MDL			0--25

MB:WG124465-4 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG124465-5 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	95	95		80--120

MB:WG124465-6 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Total Suspended Solids	0.5	1	mg/L	<MDL	

LCS:WG124465-7 Matrix: BLANK WTR Listtype:CVTSS Method:SM2540-D Project: Pkey:STD
(Lab Control Sample)

Parameter	MDL	RDL	Units	TrueValue	LCS Value	% Rec.	Qual	LabLimit
Total Suspended Solids	5	10	mg/L	100	101	101		80--120

LD:WG124465-8 L56869-6 Matrix: STORM WTR Listtype:CVTSS Method:SM2540-D Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Total Suspended Solids	1	2	mg/L	7.4	9	20		0--25

WG124802

MB:WG124802-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG124802-2 MB:WG124802-1 Matrix: BLANK WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	<MDL	20	19	95		85--115

LD:WG124802-3 L56869-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.793	0.774	2		0--20

MS:WG124802-4 L56869-1 Matrix: STORM WTR Listtype:MTICPMS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Total, ICP-MS	0.1	0.5	ug/L	0.793	20	19.7	94		75--125

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WG124836

MB:WG124836-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	

SB:WG124836-2 MB:WG124836-1 Matrix: BLANK WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	<MDL	20	19.7	98		85--115

LD:WG124836-3 L56869-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Lab Duplicate)

Parameter	MDL	RDL	Units	SAMP Value	LD Value	RPD	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.598	0.581	3		0--20

MS:WG124836-4 L56869-1 Matrix: STORM WTR Listtype:MTICPMS-DISS Method:EPA 200.8*SW846 6020A Project:423589-330-4 Pkey:STD
(Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit
Arsenic, Dissolved, ICP-MS	0.1	0.5	ug/L	0.598	20	20.4	99		75--125

WG124534

MB:WG124534-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Method Blank)

Parameter	MDL	RDL	Units	MB Value	Qual
Naphthalene	5E-04	0.005	ug/L	0.003	B
2-Methylnaphthalene	3E-04	0.003	ug/L	0.0011	B
Acenaphthylene	3E-04	0.002	ug/L	<MDL	
Acenaphthene	2E-04	0.002	ug/L	0.00022	B
Fluorene	2E-04	0.002	ug/L	0.00027	B
Phenanthrene	2E-04	0.002	ug/L	0.0015	B
Anthracene	3E-04	0.003	ug/L	<MDL	
Fluoranthene	2E-04	0.002	ug/L	0.00071	B
Pyrene	2E-04	0.002	ug/L	0.00064	B
Benzo(a)anthracene	3E-04	0.003	ug/L	0.00028	B
Chrysene	3E-04	0.003	ug/L	<MDL	
Benzo(b,j,k)fluoranthene	5E-04	0.005	ug/L	<MDL	
Benzo(a)pyrene	5E-04	0.005	ug/L	<MDL	
Indeno(1,2,3-Cd)Pyrene	3E-04	0.003	ug/L	<MDL	

Dibenzo(a,h)anthracene	4E-04	0.004	ug/L	<MDL
Benzo(g,h,i)perylene	3E-04	0.003	ug/L	<MDL
Total LPAHs	2E-04	0.002	ug/L	0.00499
Total HPAHS	2E-04	0.002	ug/L	0.00163

SB:WG124534-2 MB:WG124534-1 Matrix: BLANK WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project: Pkey:STD
(Spike Blank, Method Blank)

Parameter	MDL	RDL	Units	MB Value	TrueValue	SB Value	% Rec.	Qual	LabLimit
Naphthalene	5E-04	0.005	ug/L	0.003	0.1	0.0349	32	*	40--160
2-Methylnaphthalene	3E-04	0.003	ug/L	0.0011	0.1	0.0345	33	*	40--160
Acenaphthylene	3E-04	0.002	ug/L	<MDL	0.1	0.0833	83		40--160
Acenaphthene	2E-04	0.002	ug/L	0.00022	0.1	0.0578	58		40--160
Fluorene	2E-04	0.002	ug/L	0.00027	0.1	0.0798	80		40--160
Phenanthrene	2E-04	0.002	ug/L	0.0015	0.1	0.0825	81		40--160
Anthracene	3E-04	0.003	ug/L	<MDL	0.1	0.0879	88		40--160
Fluoranthene	2E-04	0.002	ug/L	0.00071	0.1	0.105	104		40--160
Pyrene	2E-04	0.002	ug/L	0.00064	0.1	0.0993	99		40--160
Benzo(a)anthracene	3E-04	0.003	ug/L	0.00028	0.1	0.0965	96		40--160
Chrysene	3E-04	0.003	ug/L	<MDL	0.1	0.106	106		40--160
Benzo(b,j,k)fluoranthene	5E-04	0.005	ug/L	<MDL	0.2	0.261	130		40--160
Benzo(a)pyrene	5E-04	0.005	ug/L	<MDL	0.1	0.128	128		40--160
Indeno(1,2,3-Cd)Pyrene	3E-04	0.003	ug/L	<MDL	0.1	0.128	128		40--160
Dibenzo(a,h)anthracene	4E-04	0.004	ug/L	<MDL	0.1	0.126	126		40--160
Benzo(g,h,i)perylene	3E-04	0.003	ug/L	<MDL	0.1	0.114	114		40--160

MSD:WG124534-4 MS:WG124534-3 L56869-2 Matrix: STORM WTR Listtype:ORPAH-SIM-LVI-LL Method:SW846 3520C*8270D SIM Project:423589-330-4 Pkey:STD
(Matrix Spike Duplicate, Matrix Spike)

Parameter	MDL	RDL	Units	SAMP Value	TrueValue	MS Value	% Rec.	Qual	LabLimit	TrueValue	MSD Value	% Rec.	Qual	RPD	Qual	LabLimit
Naphthalene	5E-04	0.005	ug/L	0.0121	0.0943	0.0654	57		40--160	0.0943	0.0686	60		5		0--40
2-Methylnaphthalene	3E-04	0.003	ug/L	0.00807	0.0943	0.0635	59		40--160	0.0943	0.0675	63		6		0--40
Acenaphthylene	2E-04	0.002	ug/L	0.00081	0.0943	0.0786	82		40--160	0.0943	0.0821	86		4		0--40
Acenaphthene	1E-04	0.001	ug/L	0.0012	0.0943	0.0606	63		40--160	0.0943	0.0629	65		4		0--40
Fluorene	1E-04	0.001	ug/L	0.0014	0.0943	0.0729	76		40--160	0.0943	0.0762	79		4		0--40
Phenanthrene	2E-04	0.001	ug/L	0.00515	0.0943	0.0802	80		40--160	0.0943	0.0782	77		2		0--40
Anthracene	2E-04	0.002	ug/L	0.00091	0.0943	0.0909	95		40--160	0.0943	0.0869	91		5		0--40
Fluoranthene	2E-04	0.002	ug/L	0.00762	0.0943	0.117	116		40--160	0.0943	0.116	115		1		0--40
Pyrene	2E-04	0.002	ug/L	0.00596	0.0943	0.0962	96		40--160	0.0943	0.0925	92		4		0--40
Benzo(a)anthracene	2E-04	0.002	ug/L	0.0019	0.0943	0.102	106		40--160	0.0943	0.0998	104		2		0--40
Chrysene	2E-04	0.002	ug/L	0.00349	0.0943	0.104	107		40--160	0.0943	0.105	108		1		0--40
Benzo(b,j,k)fluoranthene	5E-04	0.005	ug/L	0.0084	0.189	0.254	130		40--160	0.189	0.255	131		0		0--40
Benzo(a)pyrene	5E-04	0.005	ug/L	0.0035	0.0943	0.132	136		40--160	0.0943	0.134	139		2		0--40

Indeno(1,2,3-Cd)Pyrene	2E-04	0.002	ug/L	0.00379	0.0943	0.128	132		40--160	0.0943	0.134	138	4	0--40
Dibenzo(a,h)anthracene	3E-04	0.003	ug/L	0.00093	0.0943	0.114	119		40--160	0.0943	0.126	133	10	0--40
Benzo(g,h,i)perylene	3E-04	0.003	ug/L	0.00428	0.0943	0.113	115		40--160	0.0943	0.118	121	5	0--40

Surrogate:	2-Fluorobiphenyl	d14-Terphenyl
(Lab Limits)	40--160	40--160
L56869-1	50	102
L56869-2	56	95
L56869-3	51	103
L56869-4	59	109
L56869-5	54	100
L56869-6	59	94
WG124534-1	68	129
WG124534-2	31 *	103
WG124534-3	49	108
WG124534-4	52	108

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

King County Environmental Laboratory
322 W. Ewing Street
Seattle WA 98119
ATTN: Mr. Fritz Grothkopp

February 27, 2013

SUBJECT: Lower Duwamish Waterway, Data Validation

Dear Mr. Grothkopp,

Enclosed is the final validation report for the fraction listed below. This SDG was received on December 1, 2011. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 26805-2:

SDG #	**Fraction**
DPWG38021	Polychlorinated Biphenyls as Congeners

The data validation was performed under EPA Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Green River Loading Study Sampling and Analysis Plan, Final, October 2011
- EPA Region 10 SOP for the Validation of Polychlorinated Dibensodioxin(PCDD) and Polychlorinated Dibenzofuran(PCDF) Data, Revision 2.0, January 1996

Please feel free to contact us if you have any questions.

Sincerely,

Stella S. Cuenco
Operations Manager/Senior Chemist

2,882 Pages CD RTC CDs

Attachment 1

II/III	LDC #26805 (King County - Seattle WA / Lower Duwamish Water) Project #																																		
LDC	SDG#	DATE REC'D	(3) DATE DUE	Dioxins (1613B)		PCB Cong (1668A)																													
Matrix:	Water/Wipe			W	WP	W	WP	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	DPWG38006	12/01/11	12/22/11	3	0	-	-																												
B	DPWG38021	12/01/11	12/22/11	-	-	18	0																												
C	DPWG38023	12/01/11	12/22/11	0	1	-	-	Level II																											
D	DPWG38037	12/01/11	12/22/11	-	-	0	1	Level II																											
E	DPWG38047	12/01/11	12/22/11	-	-	3	0																												
Total	A/SC			3	1	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

26805ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Lower Duwamish Waterway
Collection Date:	September 6 through September 15, 2011
LDC Report Date:	May 15, 2012
Matrix:	Water
Parameters:	Polychlorinated Biphenyls as Congeners
Validation Level:	EPA Level III
Laboratory:	AXYS Analytical Services Ltd.
Sample Delivery Group (SDG):	DPWG38021

Sample Identification

L54090-1
L54090-2
L54090-3
L54117-1
L54117-2
L54117-3
L54117-4
L54125-1
L54125-4
L54125-3
L54147-1
L54147-2
L54147-3
L54147-4
L54148-1
L54148-2
L54149-1
L54149-2
L54117-1DUP

Introduction

This data review covers 19 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1668A for Polychlorinated Biphenyls as Congeners.

This review follows the Green River Loading Study Sampling and Analysis Plan (Final October 2011) and EPA Region 10 SOP for the Validation of Polychlorinated Dibenzodioxin (PCDD) and Polychlorinated Dibenzofuran (PCDF) Data (Revision 2.0, January 31, 1996).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

- J1 Blank Contamination: Indicates possible high bias and/or false positives.
- J2 Calibration Range exceeded: Indicates possible low bias.
- J3 Holding times not met: Indicates low bias for most analytes.
- J4 Other QC parameters outside control limits: bias not readily determined.
- J5 Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
- J6 Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures.

Cooler temperatures for all samples were reported at 9°C upon receipt by the laboratory.

All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all congeners. The chromatographic resolution between the congeners PCB-23 and PCB-34 and congeners PCB-182 and PCB-187 was resolved with a valley of less than or equal to 40%.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

The ion abundance ratios for all PCBs were within method criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 30.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The ion abundance ratios for all PCBs were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyls as congeners contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
WG37726-101	9/23/11	PCB-1	1.85 pg/L	All samples in SDG DPWG38021
		PCB-2	1.36 pg/L	
		PCB-3	3.12 pg/L	
		PCB-7	15.5 pg/L	
		PCB-8	1.63 pg/L	
		PCB-11	9.50 pg/L	
		PCB-15	2.20 pg/L	
		PCB-16	0.874 pg/L	
		PCB-17	0.669 pg/L	
		PCBs 18 + 30	2.03 pg/L	
		PCBs 20 + 28	4.49 pg/L	
		PCBs 21 + 33	1.50 pg/L	
		PCB-22	1.49 pg/L	
		PCB-31	2.55 pg/L	
		PCB-32	0.827 pg/L	
		PCB-37	1.22 pg/L	
		PCBs 40 + 41 + 71	1.94 pg/L	
		PCBs 45 + 51	0.881 pg/L	
		PCBs 49 + 69	1.66 pg/L	
		PCBs 50 + 53	0.542 pg/L	
		PCB-60	0.820 pg/L	
		PCBs 61 + 70 + 74 +76	6.26 pg/L	
		PCB-66	2.49 pg/L	
		PCB-77	0.655 pg/L	
		PCB-84	1.30 pg/L	
		PCBs 90 + 101 + 113	5.01 pg/L	
		PCBs 93 + 95 + 98 + 100 + 102	3.51 pg/L	
		PCB-105	1.74 pg/L	
		PCBs 110 + 115	5.22 pg/L	
		PCB-118	3.36 pg/L	
		PCBs 147 + 149	2.19 pg/L	
		PCB-187	1.49 pg/L	
		PCB-209	1.29 pg/L	
		Total Monochloro Biphenyls	6.33 pg/L	
		Total Dichloro Biphenyls	28.8 pg/L	
		Total Trichloro Biphenyls	15.7 pg/L	
		Total Tetrachloro Biphenyls	15.2 pg/L	
		Total Pentachloro Biphenyls	20.1 pg/L	
		Total Hexachloro Biphenyls	2.19 pg/L	
		Total Heptachloro Biphenyls	1.49 pg/L	
		Decachloro Biphenyl	1.29 pg/L	
		Total PCBs	91.2 pg/L	

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L54090-1	PCB-1	1.99 pg/L	1.99U pg/L
	PCB-2	1.19 pg/L	1.19U pg/L
	PCB-3	3.48 pg/L	3.48U pg/L
	PCB-11	19.6 pg/L	19.6U pg/L
	PCB-15	7.17 pg/L	7.17U pg/L
	PCBs 20 + 28	20.3 pg/L	20.3U pg/L
	PCB-22	6.57 pg/L	6.57U pg/L
	PCB-32	3.93 pg/L	3.93U pg/L
	PCB-37	6.10 pg/L	6.10U pg/L
	PCBs 40 + 41 + 71	4.95 pg/L	4.95U pg/L
	PCBs 50 + 53	1.14 pg/L	1.14U pg/L
	PCB-60	3.42 pg/L	3.42U pg/L
	PCB-77	2.75 pg/L	2.75U pg/L
	PCB-84	5.45 pg/L	5.45U pg/L
	PCBs 147 + 149	10.1 pg/L	10.1U pg/L
	Total Monochloro Biphenyls	6.66 pg/L	6.66U pg/L
L54090-2	PCB-2	1.04 pg/L	1.04U pg/L
	PCB-7	3.49 pg/L	3.49U pg/L
	PCB-11	20.0 pg/L	20.0U pg/L
	PCB-16	2.08 pg/L	2.08U pg/L
	PCB-17	2.67 pg/L	2.67U pg/L
	PCBs 21 + 33	3.17 pg/L	3.17U pg/L
	PCB-22	2.54 pg/L	2.54U pg/L
	PCB-32	1.38 pg/L	1.38U pg/L
	PCB-60	1.83 pg/L	1.83U pg/L
	PCBs 61 + 70 + 74 +76	9.75 pg/L	9.75U pg/L
	PCB-84	2.67 pg/L	2.67U pg/L
L54090-3	PCB-1	2.31 pg/L	2.31U pg/L
	PCB-3	4.00 pg/L	4.00U pg/L
	PCB-7	3.08 pg/L	3.08U pg/L
	PCB-8	3.70 pg/L	3.70U pg/L
	PCB-11	12.6 pg/L	12.6U pg/L
	PCB-15	3.90 pg/L	3.90U pg/L
	PCB-16	2.14 pg/L	2.14U pg/L
	PCB-17	2.30 pg/L	2.30U pg/L
	PCBs 18 + 30	3.54 pg/L	3.54U pg/L
	PCBs 20 + 28	6.45 pg/L	6.45U pg/L
	PCBs 21 + 33	2.48 pg/L	2.48U pg/L
	PCB-22	1.38 pg/L	1.38U pg/L
	PCB-31	4.17 pg/L	4.17U pg/L
	PCB-32	1.19 pg/L	1.19U pg/L
	PCB-37	2.04 pg/L	2.04U pg/L
	PCBs 40 + 41 + 71	2.69 pg/L	2.69U pg/L
	PCBs 49 + 69	4.73 pg/L	4.73U pg/L
	PCBs 50 + 53	1.10 pg/L	1.10U pg/L
	PCB-60	0.704 pg/L	0.704U pg/L
	PCBs 61 + 70 + 74 +76	8.48 pg/L	8.48U pg/L
	PCB-77	1.36 pg/L	1.36U pg/L
	PCBs 90 + 101 + 113	12.2 pg/L	12.2U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	11.1 pg/L	11.1U pg/L
	PCB-105	3.67 pg/L	3.67U pg/L
	PCBs 110 + 115	14.8 pg/L	14.8U pg/L
	PCB-118	8.89 pg/L	8.89U pg/L
	PCB-187	5.79 pg/L	5.79U pg/L
	Total Monochloro Biphenyls	6.31 pg/L	6.31U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54117-1	PCB-1	1.46 pg/L	1.46U pg/L
	PCB-2	1.40 pg/L	1.40U pg/L
	PCB-3	3.01 pg/L	3.01U pg/L
	PCB-8	4.52 pg/L	4.52U pg/L
	PCB-11	12.2 pg/L	12.2U pg/L
	PCB-15	3.16 pg/L	3.16U pg/L
	PCB-16	2.46 pg/L	2.46U pg/L
	PCB-17	2.54 pg/L	2.54U pg/L
	PCBs 18 + 30	4.02 pg/L	4.02U pg/L
	PCBs 20 + 28	5.73 pg/L	5.73U pg/L
	PCBs 21 + 33	2.64 pg/L	2.64U pg/L
	PCB-22	1.69 pg/L	1.69U pg/L
	PCB-31	4.15 pg/L	4.15U pg/L
	PCB-32	0.792 pg/L	0.792U pg/L
	PCB-37	1.33 pg/L	1.33U pg/L
	PCBs 40 + 41 + 71	2.34 pg/L	2.34U pg/L
	PCBs 49 + 69	2.84 pg/L	2.84U pg/L
	PCBs 61 + 70 + 74 +76	6.57 pg/L	6.57U pg/L
	PCB-66	2.60 pg/L	2.60U pg/L
	PCB-77	0.835 pg/L	0.835U pg/L
	PCB-84	1.72 pg/L	1.72U pg/L
	PCBs 90 + 101 + 113	6.62 pg/L	6.62U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	6.24 pg/L	6.24U pg/L
	PCB-105	2.87 pg/L	2.87U pg/L
	PCBs 110 + 115	7.98 pg/L	7.98U pg/L
	PCB-118	5.73 pg/L	5.73U pg/L
	PCBs 147 + 149	4.89 pg/L	4.89U pg/L
	PCB-187	1.86 pg/L	1.86U pg/L
	PCB-209	1.56 pg/L	1.56U pg/L
	Total Monochloro Biphenyls	5.87 pg/L	5.87U pg/L
	Decachloro Biphenyl	1.56 pg/L	1.56U pg/L
L54117-1DUP	PCB-1	1.61 pg/L	1.61U pg/L
	PCB-2	1.24 pg/L	1.24U pg/L
	PCB-3	3.17 pg/L	3.17U pg/L
	PCB-7	2.45 pg/L	2.45U pg/L
	PCB-8	4.74 pg/L	4.74U pg/L
	PCB-11	13.7 pg/L	13.7U pg/L
	PCB-15	4.00 pg/L	4.00U pg/L
	PCB-16	2.24 pg/L	2.24U pg/L
	PCB-17	2.65 pg/L	2.65U pg/L
	PCBs 20 + 28	7.75 pg/L	7.75U pg/L
	PCBs 21 + 33	3.31 pg/L	3.31U pg/L
	PCB-22	2.25 pg/L	2.25U pg/L
	PCB-31	4.82 pg/L	4.82U pg/L
	PCB-32	1.74 pg/L	1.74U pg/L
	PCB-37	1.40 pg/L	1.40U pg/L
	PCBs 49 + 69	4.06 pg/L	4.06U pg/L
	PCBs 50 + 53	1.14 pg/L	1.14U pg/L
	PCBs 61 + 70 + 74 +76	8.72 pg/L	8.72U pg/L
	PCB-66	3.92 pg/L	3.92U pg/L
	PCB-77	0.604 pg/L	0.604U pg/L
	PCB-84	2.79 pg/L	2.79U pg/L
	PCBs 90 + 101 + 113	6.69 pg/L	6.69U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	6.03 pg/L	6.03U pg/L
	PCB-105	3.17 pg/L	3.17U pg/L
	PCBs 110 + 115	8.54 pg/L	8.54U pg/L
	Total Monochloro Biphenyls	6.02 pg/L	6.02U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54117-2	PCB-1	1.74 pg/L	1.74U pg/L
	PCB-2	1.00 pg/L	1.00U pg/L
	PCB-8	4.13 pg/L	4.13U pg/L
	PCB-11	14.0 pg/L	14.0U pg/L
	PCB-15	2.55 pg/L	2.55U pg/L
	PCBs 18 + 30	5.45 pg/L	5.45U pg/L
	PCBs 20 + 28	6.51 pg/L	6.51U pg/L
	PCBs 21 + 33	2.28 pg/L	2.28U pg/L
	PCB-22	2.47 pg/L	2.47U pg/L
	PCB-31	4.96 pg/L	4.96U pg/L
	PCB-32	1.44 pg/L	1.44U pg/L
	PCB-37	1.26 pg/L	1.26U pg/L
	PCBs 40 + 41 + 71	2.11 pg/L	2.11U pg/L
	PCBs 49 + 69	3.24 pg/L	3.24U pg/L
	PCB-60	0.940 pg/L	0.940U pg/L
	PCBs 61 + 70 + 74 +76	7.82 pg/L	7.82U pg/L
	PCB-66	3.62 pg/L	3.62U pg/L
	PCBs 90 + 101 + 113	6.73 pg/L	6.73U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	6.48 pg/L	6.48U pg/L
	PCB-105	2.92 pg/L	2.92U pg/L
	PCBs 110 + 115	9.18 pg/L	9.18U pg/L
	PCBs 147 + 149	4.07 pg/L	4.07U pg/L
	PCB-187	1.43 pg/L	1.43U pg/L
	Total Monochloro Biphenyls	2.74 pg/L	2.74U pg/L
L54117-3	PCB-1	1.52 pg/L	1.52U pg/L
	PCB-2	1.00 pg/L	1.00U pg/L
	PCB-3	2.33 pg/L	2.33U pg/L
	PCB-7	1.51 pg/L	1.51U pg/L
	PCB-8	3.83 pg/L	3.83U pg/L
	PCB-11	12.9 pg/L	12.9U pg/L
	PCB-15	2.37 pg/L	2.37U pg/L
	PCBs 18 + 30	4.41 pg/L	4.41U pg/L
	PCBs 20 + 28	5.65 pg/L	5.65U pg/L
	PCBs 21 + 33	2.11 pg/L	2.11U pg/L
	PCB-22	1.74 pg/L	1.74U pg/L
	PCB-31	3.72 pg/L	3.72U pg/L
	PCB-32	1.53 pg/L	1.53U pg/L
	PCB-37	1.12 pg/L	1.12U pg/L
	PCBs 40 + 41 + 71	2.70 pg/L	2.70U pg/L
	PCBs 49 + 69	3.71 pg/L	3.71U pg/L
	PCBs 50 + 53	1.06 pg/L	1.06U pg/L
	PCBs 61 + 70 + 74 +76	7.93 pg/L	7.93U pg/L
	PCB-66	3.14 pg/L	3.14U pg/L
	PCB-84	3.66 pg/L	3.66U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	10.4 pg/L	10.4U pg/L
	PCB-105	3.77 pg/L	3.77U pg/L
	PCBs 110 + 115	13.7 pg/L	13.7U pg/L
	PCB-118	7.62 pg/L	7.62U pg/L
	PCBs 147 + 149	9.96 pg/L	9.96U pg/L
	PCB-187	4.40 pg/L	4.40U pg/L
	Total Monochloro Biphenyls	4.85 pg/L	4.85U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54117-4	PCB-1	1.60 pg/L	1.60U pg/L
	PCB-2	1.20 pg/L	1.20U pg/L
	PCB-3	2.97 pg/L	2.97U pg/L
	PCB-8	4.91 pg/L	4.91U pg/L
	PCB-11	30.7 pg/L	30.7U pg/L
	PCB-15	2.58 pg/L	2.58U pg/L
	PCB-16	2.75 pg/L	2.75U pg/L
	PCB-17	3.10 pg/L	3.10U pg/L
	PCBs 18 + 30	5.00 pg/L	5.00U pg/L
	PCBs 20 + 28	7.93 pg/L	7.93U pg/L
	PCBs 21 + 33	4.93 pg/L	4.93U pg/L
	PCB-31	6.69 pg/L	6.69U pg/L
	PCB-32	1.55 pg/L	1.55U pg/L
	PCB-37	3.40 pg/L	3.40U pg/L
	PCBs 40 + 41 + 71	4.32 pg/L	4.32U pg/L
	PCB-60	2.71 pg/L	2.71U pg/L
	PCBs 61 + 70 + 74 +76	19.9 pg/L	19.9U pg/L
	PCB-66	7.88 pg/L	7.88U pg/L
	PCB-77	2.40 pg/L	2.40U pg/L
	PCB-84	5.51 pg/L	5.51U pg/L
	PCBs 90 + 101 + 113	18.2 pg/L	18.2U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	15.2 pg/L	15.2U pg/L
	PCBs 110 + 115	22.8 pg/L	22.8U pg/L
	PCB-118	15.7 pg/L	15.7U pg/L
	PCB-187	4.89 pg/L	4.89U pg/L
	PCB-209	2.66 pg/L	2.66U pg/L
	Total Monochloro Biphenyls	5.77 pg/L	5.77U pg/L
	Decachloro Biphenyl	2.66 pg/L	2.66U pg/L
L54125-1	PCB-1	1.29 pg/L	1.29U pg/L
	PCB-3	2.71 pg/L	2.71U pg/L
	PCB-8	2.90 pg/L	2.90U pg/L
	PCB-11	11.9 pg/L	11.9U pg/L
	PCB-15	2.46 pg/L	2.46U pg/L
	PCB-17	1.29 pg/L	1.29U pg/L
	PCBs 20 + 28	4.00 pg/L	4.00U pg/L
	PCBs 21 + 33	2.02 pg/L	2.02U pg/L
	PCB-31	3.16 pg/L	3.16U pg/L
	PCB-32	0.964 pg/L	0.964U pg/L
	PCBs 40 + 41 + 71	1.43 pg/L	1.43U pg/L
	PCBs 49 + 69	2.32 pg/L	2.32U pg/L
	PCB-60	0.643 pg/L	0.643U pg/L
	PCBs 61 + 70 + 74 +76	5.89 pg/L	5.89U pg/L
	PCB-66	2.38 pg/L	2.38U pg/L
	PCBs 90 + 101 + 113	7.08 pg/L	7.08U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	5.96 pg/L	5.96U pg/L
	PCB-105	2.52 pg/L	2.52U pg/L
	PCBs 110 + 115	7.80 pg/L	7.80U pg/L
	PCB-118	5.58 pg/L	5.58U pg/L
	PCB-187	1.33 pg/L	1.33U pg/L
	PCB-209	1.71 pg/L	1.71U pg/L
	Total Monochloro Biphenyls	4.00 pg/L	4.00U pg/L
	Decachloro Biphenyl	1.71 pg/L	1.71U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54125-4	PCB-1	1.18 pg/L	1.18U pg/L
	PCB-2	0.974 pg/L	0.974U pg/L
	PCB-3	2.41 pg/L	2.41U pg/L
	PCB-11	10.5 pg/L	10.5U pg/L
	PCB-15	1.68 pg/L	1.68U pg/L
	PCB-17	2.28 pg/L	2.28U pg/L
	PCBs 18 + 30	2.57 pg/L	2.57U pg/L
	PCBs 20 + 28	4.14 pg/L	4.14U pg/L
	PCBs 21 + 33	1.88 pg/L	1.88U pg/L
	PCB-31	2.59 pg/L	2.59U pg/L
	PCB-32	0.655 pg/L	0.655U pg/L
	PCB-37	1.16 pg/L	1.16U pg/L
	PCBs 49 + 69	2.93 pg/L	2.93U pg/L
	PCBs 50 + 53	0.660 pg/L	0.660U pg/L
	PCBs 61 + 70 + 74 +76	10.6 pg/L	10.6U pg/L
	PCB-84	4.09 pg/L	4.09U pg/L
	PCBs 90 + 101 + 113	15.5 pg/L	15.5U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	10.5 pg/L	10.5U pg/L
	PCBs 110 + 115	15.5 pg/L	15.5U pg/L
	PCB-118	9.93 pg/L	9.93U pg/L
	PCBs 147 + 149	9.01 pg/L	9.01U pg/L
	PCB-187	2.11 pg/L	2.11U pg/L
	PCB-209	1.36 pg/L	1.36U pg/L
	Total Monochloro Biphenyls	4.56 pg/L	4.56U pg/L
	Total Dichloro Biphenyls	12.2 pg/L	12.2U pg/L
	Decachloro Biphenyl	1.36 pg/L	1.36U pg/L
L54125-3	PCB-1	1.60 pg/L	1.60U pg/L
	PCB-2	1.65 pg/L	1.65U pg/L
	PCB-8	3.01 pg/L	3.01U pg/L
	PCB-11	17.0 pg/L	17.0U pg/L
	PCB-15	2.44 pg/L	2.44U pg/L
	PCB-17	1.79 pg/L	1.79U pg/L
	PCBs 20 + 28	5.66 pg/L	5.66U pg/L
	PCB-22	1.40 pg/L	1.40U pg/L
	PCB-31	3.60 pg/L	3.60U pg/L
	PCB-37	1.43 pg/L	1.43U pg/L
	PCBs 49 + 69	5.33 pg/L	5.33U pg/L
	PCBs 50 + 53	1.53 pg/L	1.53U pg/L
	PCBs 61 + 70 + 74 +76	9.46 pg/L	9.46U pg/L
	PCB-84	4.12 pg/L	4.12U pg/L
	PCBs 90 + 101 + 113	14.6 pg/L	14.6U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	13.4 pg/L	13.4U pg/L
	PCB-105	5.09 pg/L	5.09U pg/L
	PCBs 110 + 115	20.3 pg/L	20.3U pg/L
	PCB-118	8.52 pg/L	8.52U pg/L
	PCB-187	5.21 pg/L	5.21U pg/L
	PCB-209	4.39 pg/L	4.39U pg/L
	Total Monochloro Biphenyls	3.25 pg/L	3.25U pg/L
	Total Dichloro Biphenyls	22.5 pg/L	22.5U pg/L
	Decachloro Biphenyl	4.39 pg/L	4.39U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54147-1	PCB-1	1.32 pg/L	1.32U pg/L
	PCB-2	0.910 pg/L	0.910U pg/L
	PCB-3	2.10 pg/L	2.10U pg/L
	PCB-8	2.68 pg/L	2.68U pg/L
	PCB-11	9.87 pg/L	9.87U pg/L
	PCBs 20 + 28	3.49 pg/L	3.49U pg/L
	PCBs 21 + 33	1.48 pg/L	1.48U pg/L
	PCB-22	1.26 pg/L	1.26U pg/L
	PCB-31	2.83 pg/L	2.83U pg/L
	PCB-37	0.599 pg/L	0.599U pg/L
	PCBs 49 + 69	2.48 pg/L	2.48U pg/L
	PCBs 61 + 70 + 74 +76	5.32 pg/L	5.32U pg/L
	PCB-84	1.71 pg/L	1.71U pg/L
	PCBs 90 + 101 + 113	6.39 pg/L	6.39U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	5.59 pg/L	5.59U pg/L
	PCBs 110 + 115	9.69 pg/L	9.69U pg/L
	PCB-118	4.66 pg/L	4.66U pg/L
	PCBs 147 + 149	3.89 pg/L	3.89U pg/L
	PCB-187	1.19 pg/L	1.19U pg/L
	Total Monochloro Biphenyls	4.33 pg/L	4.33U pg/L
	Total Dichloro Biphenyls	12.6 pg/L	12.6U pg/L
	Total Trichloro Biphenyls	9.66 pg/L	9.66U pg/L
L54147-2	PCB-1	2.00 pg/L	2.00U pg/L
	PCB-3	2.85 pg/L	2.85U pg/L
	PCB-8	4.61 pg/L	4.61U pg/L
	PCB-11	18.7 pg/L	18.7U pg/L
	PCB-15	2.66 pg/L	2.66U pg/L
	PCBs 18 + 30	5.07 pg/L	5.07U pg/L
	PCBs 20 + 28	6.26 pg/L	6.26U pg/L
	PCBs 21 + 33	3.52 pg/L	3.52U pg/L
	PCB-22	2.45 pg/L	2.45U pg/L
	PCB-31	4.97 pg/L	4.97U pg/L
	PCB-37	1.79 pg/L	1.79U pg/L
	PCBs 40 + 41 + 71	3.37 pg/L	3.37U pg/L
	PCBs 50 + 53	1.12 pg/L	1.12U pg/L
	PCB-60	1.63 pg/L	1.63U pg/L
	PCBs 61 + 70 + 74 +76	11.8 pg/L	11.8U pg/L
	PCB-66	5.09 pg/L	5.09U pg/L
	PCB-77	1.41 pg/L	1.41U pg/L
	PCB-84	4.74 pg/L	4.74U pg/L
	PCBs 90 + 101 + 113	13.0 pg/L	13.0U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	11.5 pg/L	11.5U pg/L
	PCBs 110 + 115	16.4 pg/L	16.4U pg/L
	PCB-118	8.73 pg/L	8.73U pg/L
	PCBs 147 + 149	8.93 pg/L	8.93U pg/L
	PCB-187	3.79 pg/L	3.79U pg/L
	Total Monochloro Biphenyls	4.85 pg/L	4.85U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54147-3	PCB-1	2.54 pg/L	2.54U pg/L
	PCB-3	2.79 pg/L	2.79U pg/L
	PCB-8	4.28 pg/L	4.28U pg/L
	PCB-11	17.0 pg/L	17.0U pg/L
	PCB-15	2.86 pg/L	2.86U pg/L
	PCB-16	3.89 pg/L	3.89U pg/L
	PCB-17	3.68 pg/L	3.68U pg/L
	PCBs 18 + 30	6.70 pg/L	6.70U pg/L
	PCBs 20 + 28	7.60 pg/L	7.60U pg/L
	PCB-22	2.47 pg/L	2.47U pg/L
	PCB-31	5.95 pg/L	5.95U pg/L
	PCB-32	1.79 pg/L	1.79U pg/L
	PCBs 40 + 41 + 71	3.35 pg/L	3.35U pg/L
	PCBs 49 + 69	5.16 pg/L	5.16U pg/L
	PCBs 50 + 53	1.24 pg/L	1.24U pg/L
	PCBs 61 + 70 + 74 +76	12.0 pg/L	12.0U pg/L
	PCB-66	5.65 pg/L	5.65U pg/L
	PCB-77	1.01 pg/L	1.01U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	15.3 pg/L	15.3U pg/L
	PCB-105	5.15 pg/L	5.15U pg/L
	PCBs 110 + 115	20.0 pg/L	20.0U pg/L
	PCB-118	9.83 pg/L	9.83U pg/L
	PCB-187	6.78 pg/L	6.78U pg/L
	PCB-209	1.64 pg/L	1.64U pg/L
	Total Monochloro Biphenyls	5.33 pg/L	5.33U pg/L
	Decachloro Biphenyl	1.64 pg/L	1.64U pg/L
L54147-4	PCB-2	1.49 pg/L	1.49U pg/L
	PCB-8	2.90 pg/L	2.90U pg/L
	PCB-11	14.8 pg/L	14.8U pg/L
	PCB-15	3.33 pg/L	3.33U pg/L
	PCBs 18 + 30	3.30 pg/L	3.30U pg/L
	PCBs 20 + 28	6.08 pg/L	6.08U pg/L
	PCBs 21 + 33	2.32 pg/L	2.32U pg/L
	PCB-22	1.94 pg/L	1.94U pg/L
	PCB-31	3.87 pg/L	3.87U pg/L
	PCB-32	0.843 pg/L	0.843U pg/L
	PCBs 50 + 53	0.772 pg/L	0.772U pg/L
	PCB-60	1.13 pg/L	1.13U pg/L
	PCBs 61 + 70 + 74 +76	8.87 pg/L	8.87U pg/L
	PCB-66	3.61 pg/L	3.61U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	6.50 pg/L	6.50U pg/L
	PCB-105	2.39 pg/L	2.39U pg/L
	PCBs 110 + 115	7.57 pg/L	7.57U pg/L
	PCBs 147 + 149	5.31 pg/L	5.31U pg/L
	PCB-187	1.87 pg/L	1.87U pg/L
	PCB-209	1.58 pg/L	1.58U pg/L
	Total Monochloro Biphenyls	1.49 pg/L	1.49U pg/L
	Total Dichloro Biphenyls	21.0 pg/L	21.0U pg/L
	Decachloro Biphenyl	1.58 pg/L	1.58U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54148-1	PCB-1	2.06 pg/L	2.06U pg/L
	PCB-3	3.27 pg/L	3.27U pg/L
	PCB-8	4.17 pg/L	4.17U pg/L
	PCB-11	15.2 pg/L	15.2U pg/L
	PCB-15	3.97 pg/L	3.97U pg/L
	PCB-16	1.92 pg/L	1.92U pg/L
	PCB-17	2.43 pg/L	2.43U pg/L
	PCBs 18 + 30	5.44 pg/L	5.44U pg/L
	PCBs 20 + 28	7.65 pg/L	7.65U pg/L
	PCBs 21 + 33	3.12 pg/L	3.12U pg/L
	PCB-22	2.96 pg/L	2.96U pg/L
	PCB-31	3.92 pg/L	3.92U pg/L
	PCB-32	1.48 pg/L	1.48U pg/L
	PCB-37	3.33 pg/L	3.33U pg/L
	PCBs 40 + 41 + 71	3.57 pg/L	3.57U pg/L
	PCB-60	1.87 pg/L	1.87U pg/L
	PCBs 61 + 70 + 74 +76	10.9 pg/L	10.9U pg/L
	PCB-66	5.28 pg/L	5.28U pg/L
	PCB-77	2.18 pg/L	2.18U pg/L
	PCBs 90 + 101 + 113	11.5 pg/L	11.5U pg/L
	PCBs 93 + 95 + 98 + 100 + 102	13.6 pg/L	13.6U pg/L
	PCBs 110 + 115	23.8 pg/L	23.8U pg/L
	PCB-118	11.5 pg/L	11.5U pg/L
	PCB-187	5.72 pg/L	5.72U pg/L
	Total Monochloro Biphenyls	5.33 pg/L	5.33U pg/L
L54148-2	PCB-1	2.21 pg/L	2.21U pg/L
	PCB-2	1.61 pg/L	1.61U pg/L
	PCB-3	3.66 pg/L	3.66U pg/L
	PCB-8	6.37 pg/L	6.37U pg/L
	PCB-11	34.5 pg/L	34.5U pg/L
	PCB-16	4.31 pg/L	4.31U pg/L
	PCB-17	4.84 pg/L	4.84U pg/L
	PCBs 18 + 30	8.90 pg/L	8.90U pg/L
	PCBs 20 + 28	14.2 pg/L	14.2U pg/L
	PCBs 21 + 33	6.51 pg/L	6.51U pg/L
	PCB-22	5.46 pg/L	5.46U pg/L
	PCB-31	10.2 pg/L	10.2U pg/L
	PCB-32	3.17 pg/L	3.17U pg/L
	PCB-37	3.83 pg/L	3.83U pg/L
	PCBs 40 + 41 + 71	7.47 pg/L	7.47U pg/L
	PCB-60	3.64 pg/L	3.64U pg/L
	PCBs 61 + 70 + 74 +76	27.1 pg/L	27.1U pg/L
	PCB-66	11.6 pg/L	11.6U pg/L
	PCB-77	2.70 pg/L	2.70U pg/L
	PCB-209	2.36 pg/L	2.36U pg/L
	Total Monochloro Biphenyls	7.48 pg/L	7.48U pg/L
	Decachloro Biphenyl	2.36 pg/L	2.36U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54149-1	PCB-1	2.21 pg/L	2.21U pg/L
	PCB-2	1.79 pg/L	1.79U pg/L
	PCB-3	3.27 pg/L	3.27U pg/L
	PCB-7	5.06 pg/L	5.06U pg/L
	PCB-8	3.51 pg/L	3.51U pg/L
	PCB-11	14.6 pg/L	14.6U pg/L
	PCBs 18 + 30	5.63 pg/L	5.63U pg/L
	PCBs 20 + 28	6.86 pg/L	6.86U pg/L
	PCBs 21 + 33	2.69 pg/L	2.69U pg/L
	PCB-22	2.90 pg/L	2.90U pg/L
	PCB-31	5.15 pg/L	5.15U pg/L
	PCB-32	1.56 pg/L	1.56U pg/L
	PCBs 49 + 69	4.22 pg/L	4.22U pg/L
	PCBs 50 + 53	1.15 pg/L	1.15U pg/L
	PCBs 61 + 70 + 74 +76	11.5 pg/L	11.5U pg/L
	PCB-66	4.17 pg/L	4.17U pg/L
	PCBs 90 + 101 + 113	7.90 pg/L	7.90U pg/L
	PCB-105	3.21 pg/L	3.21U pg/L
	PCBs 110 + 115	12.5 pg/L	12.5U pg/L
	PCB-118	7.11 pg/L	7.11U pg/L
	PCBs 147 + 149	5.87 pg/L	5.87U pg/L
	PCB-187	2.57 pg/L	2.57U pg/L
	Total Monochloro Biphenyls	7.27 pg/L	7.27U pg/L
	Total Dichloro Biphenyls	23.2 pg/L	23.2U pg/L
L54149-2	PCB-1	2.49 pg/L	2.49U pg/L
	PCB-2	2.30 pg/L	2.30U pg/L
	PCB-11	23.1 pg/L	23.1U pg/L
	PCB-15	4.06 pg/L	4.06U pg/L
	PCB-16	3.51 pg/L	3.51U pg/L
	PCB-17	4.40 pg/L	4.40U pg/L
	PCBs 18 + 30	7.37 pg/L	7.37U pg/L
	PCBs 20 + 28	11.7 pg/L	11.7U pg/L
	PCBs 21 + 33	5.38 pg/L	5.38U pg/L
	PCB-22	4.06 pg/L	4.06U pg/L
	PCB-31	7.93 pg/L	7.93U pg/L
	PCB-32	2.05 pg/L	2.05U pg/L
	PCB-37	2.76 pg/L	2.76U pg/L
	PCBs 40 + 41 + 71	5.29 pg/L	5.29U pg/L
	PCBs 49 + 69	6.50 pg/L	6.50U pg/L
	PCBs 50 + 53	2.21 pg/L	2.21U pg/L
	PCB-60	1.83 pg/L	1.83U pg/L
	PCBs 61 + 70 + 74 +76	17.1 pg/L	17.1U pg/L
	PCB-66	7.11 pg/L	7.11U pg/L
	PCB-77	1.35 pg/L	1.35U pg/L
	PCBs 90 + 101 + 113	19.8 pg/L	19.8U pg/L
	PCB-105	5.72 pg/L	5.72U pg/L
	PCBs 110 + 115	24.8 pg/L	24.8U pg/L
	PCB-118	12.9 pg/L	12.9U pg/L
	PCB-209	2.52 pg/L	2.52U pg/L
	Total Monochloro Biphenyls	4.79 pg/L	4.79U pg/L
	Total Dichloro Biphenyls	27.2 pg/L	27.2U pg/L
	Decachloro Biphenyl	2.52 pg/L	2.52U pg/L

Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) and relative percent differences (RPD) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries (%R) were within QC limits with the following exceptions:

Sample	Internal Standards	%R (Limits)	Compound	Flag	A or P
L54148-1	^{13}C-PCB-155 ^{13}C-PCB-188	20.9 (25-150) 23.9 (25-150)	PCBs 128 + 166 PCB 129 + 138 + 160 + 163 PCB-130 PCB-131 PCB-132 PCB-133 PCBs 134 + 143 PCBs 135 + 151 + 154 PCB-136 PCB-137 PCBs 139 + 140 PCB-141 PCB-142 PCB-144 PCB-145 PCB-146 PCBs 147 + 149 PCB-148 PCB-150 PCB-152 PCBs 153 + 168 PCB-155 PCBs 156 + 167 PCB-158 PCB-159 PCB-161 PCB-162 PCB-164 PCB-165 PCB-167 PCB-169 PCB-170 PCBs 171 + 173 PCB-172 PCB-174 PCB-175 PCB-176 PCB-177 PCB-178 PCB-179 PCBs 180 + 193 PCB-181 PCB-182 PCBs 183 + 185 PCB-184 PCB-186 PCB-187 PCB-188 PCB-189 PCB-190 PCB-191 PCB-192 Total Hexachloro Biphenyls Total Heptachloro Biphenyls	J (all detects) UJ (all non-detects)	P

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG DPWG38021	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG DPWG38021

SDG	Sample	Compound	Flag	A or P	Reason
DPWG38021	L54148-1	PCBs 128 + 166 PCB 129 + 138 + 160 + 163 PCB-130 PCB-131 PCB-132 PCB-133 PCBs 134 + 143 PCBs 135 + 151 + 154 PCB-136 PCB-137 PCBs 139 + 140 PCB-141 PCB-142 PCB-144 PCB-145 PCB-146 PCBs 147 + 149 PCB-148 PCB-150 PCB-152 PCBs 153 + 168 PCB-155 PCBs 156 + 167 PCB-158 PCB-159 PCB-161 PCB-162 PCB-164 PCB-165 PCB-167 PCB-169 PCB-170 PCBs 171 + 173 PCB-172 PCB-174 PCB-175 PCB-176 PCB-177 PCB-178 PCB-179 PCBs 180 + 193 PCB-181 PCB-182 PCBs 183 + 185 PCB-184 PCB-186 PCB-187 PCB-188 PCB-189 PCB-190 PCB-191 PCB-192 Total Hexachloro Biphenyls Total Heptachloro Biphenyls	J (all detects) UJ (all non-detects)	P	Internal standards (%R)

SDG	Sample	Compound	Flag	A or P	Reason
DPWG38021	L54090-1 L54090-2 L54090-3 L54117-1 L54117-2 L54117-3 L54117-4 L54125-1 L54125-4 L54125-3 L54147-1 L54147-2 L54147-3 L54147-4 L54148-1 L54148-2 L54149-1 L54149-2 L54117-1DUP	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A	Compound quantitation and RLs (EMPC)

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG DPWG38021

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54090-1	PCB-1 PCB-2 PCB-3 PCB-11 PCB-15 PCBs 20 + 28 PCB-22 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCBs 50 + 53 PCB-60 PCB-77 PCB-84 PCBs 147 + 149 Total Monochloro Biphenyls	1.99U pg/L 1.19U pg/L 3.48U pg/L 19.6U pg/L 7.17U pg/L 20.3U pg/L 6.57U pg/L 3.93U pg/L 6.10U pg/L 4.95U pg/L 1.14U pg/L 3.42U pg/L 2.75U pg/L 5.45U pg/L 10.1U pg/L 6.66U pg/L	A
DPWG38021	L54090-2	PCB-2 PCB-7 PCB-11 PCB-16 PCB-17 PCBs 21 + 33 PCB-22 PCB-32 PCB-60 PCBs 61 + 70 + 74 +76 PCB-84	1.04U pg/L 3.49U pg/L 20.0U pg/L 2.08U pg/L 2.67U pg/L 3.17U pg/L 2.54U pg/L 1.38U pg/L 1.83U pg/L 9.75U pg/L 2.67U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54090-3	PCB-1 PCB-3 PCB-7 PCB-8 PCB-11 PCB-15 PCB-16 PCB-17 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCBs 49 + 69 PCBs 50 + 53 PCB-60 PCBs 61 + 70 + 74 +76 PCB-77 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCB-118 PCB-187 Total Monochloro Biphenyls	2.31U pg/L 4.00U pg/L 3.08U pg/L 3.70U pg/L 12.6U pg/L 3.90U pg/L 2.14U pg/L 2.30U pg/L 3.54U pg/L 6.45U pg/L 2.48U pg/L 1.38U pg/L 4.17U pg/L 1.19U pg/L 2.04U pg/L 2.69U pg/L 4.73U pg/L 1.10U pg/L 0.704U pg/L 8.48U pg/L 1.36U pg/L 12.2U pg/L 11.1U pg/L 3.67U pg/L 14.8U pg/L 8.89U pg/L 5.79U pg/L 6.31U pg/L	A
DPWG38021	L54117-1	PCB-1 PCB-2 PCB-3 PCB-8 PCB-11 PCB-15 PCB-16 PCB-17 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCBs 49 + 69 PCBs 61 + 70 + 74 +76 PCB-66 PCB-77 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCB-118 PCBs 147 + 149 PCB-187 PCB-209 Total Monochloro Biphenyls Decachloro Biphenyl	1.46U pg/L 1.40U pg/L 3.01U pg/L 4.52U pg/L 12.2U pg/L 3.16U pg/L 2.46U pg/L 2.54U pg/L 4.02U pg/L 5.73U pg/L 2.64U pg/L 1.69U pg/L 4.15U pg/L 0.792U pg/L 1.33U pg/L 2.34U pg/L 2.84U pg/L 6.57U pg/L 2.60U pg/L 0.835U pg/L 1.72U pg/L 6.62U pg/L 6.24U pg/L 2.87U pg/L 7.98U pg/L 5.73U pg/L 4.89U pg/L 1.86U pg/L 1.56U pg/L 5.87U pg/L 1.56U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54117-1DUP	PCB-1 PCB-2 PCB-3 PCB-7 PCB-8 PCB-11 PCB-15 PCB-16 PCB-17 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 49 + 69 PCBs 50 + 53 PCBs 61 + 70 + 74 +76 PCB-66 PCB-77 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 Total Monochloro Biphenyls	1.61U pg/L 1.24U pg/L 3.17U pg/L 2.45U pg/L 4.74U pg/L 13.7U pg/L 4.00U pg/L 2.24U pg/L 2.65U pg/L 7.75U pg/L 3.31U pg/L 2.25U pg/L 4.82U pg/L 1.74U pg/L 1.40U pg/L 4.06U pg/L 1.14U pg/L 8.72U pg/L 3.92U pg/L 0.604U pg/L 2.79U pg/L 6.69U pg/L 6.03U pg/L 3.17U pg/L 8.54U pg/L 6.02U pg/L	A
DPWG38021	L54117-2	PCB-1 PCB-2 PCB-8 PCB-11 PCB-15 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCBs 49 + 69 PCB-60 PCBs 61 + 70 + 74 +76 PCB-66 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCBs 147 + 149 PCB-187 Total Monochloro Biphenyls	1.74U pg/L 1.00U pg/L 4.13U pg/L 14.0U pg/L 2.55U pg/L 5.45U pg/L 6.51U pg/L 2.28U pg/L 2.47U pg/L 4.96U pg/L 1.44U pg/L 1.26U pg/L 2.11U pg/L 3.24U pg/L 0.940U pg/L 7.82U pg/L 3.62U pg/L 6.73U pg/L 6.48U pg/L 2.92U pg/L 9.18U pg/L 4.07U pg/L 1.43U pg/L 2.74U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54117-3	PCB-1 PCB-2 PCB-3 PCB-7 PCB-8 PCB-11 PCB-15 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCBs 49 + 69 PCBs 50 + 53 PCBs 61 + 70 + 74 +76 PCB-66 PCB-84 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCB-118 PCBs 147 + 149 PCB-187 Total Monochloro Biphenyls	1.52U pg/L 1.00U pg/L 2.33U pg/L 1.51U pg/L 3.83U pg/L 12.9U pg/L 2.37U pg/L 4.41U pg/L 5.65U pg/L 2.11U pg/L 1.74U pg/L 3.72U pg/L 1.53U pg/L 1.12U pg/L 2.70U pg/L 3.71U pg/L 1.06U pg/L 7.93U pg/L 3.14U pg/L 3.66U pg/L 10.4U pg/L 3.77U pg/L 13.7U pg/L 7.62U pg/L 9.96U pg/L 4.40U pg/L 4.85U pg/L	A
DPWG38021	L54117-4	PCB-1 PCB-2 PCB-3 PCB-8 PCB-11 PCB-15 PCB-16 PCB-17 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCB-60 PCBs 61 + 70 + 74 +76 PCB-66 PCB-77 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCBs 110 + 115 PCB-118 PCB-187 PCB-209 Total Monochloro Biphenyls Decachloro Biphenyl	1.60U pg/L 1.20U pg/L 2.97U pg/L 4.91U pg/L 30.7U pg/L 2.58U pg/L 2.75U pg/L 3.10U pg/L 5.00U pg/L 7.93U pg/L 4.93U pg/L 6.69U pg/L 1.55U pg/L 3.40U pg/L 4.32U pg/L 2.71U pg/L 19.9U pg/L 7.88U pg/L 2.40U pg/L 5.51U pg/L 18.2U pg/L 15.2U pg/L 22.8U pg/L 15.7U pg/L 4.89U pg/L 2.66U pg/L 5.77U pg/L 2.66U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54125-1	PCB-1 PCB-3 PCB-8 PCB-11 PCB-15 PCB-17 PCBs 20 + 28 PCBs 21 + 33 PCB-31 PCB-32 PCBs 40 + 41 + 71 PCBs 49 + 69 PCB-60 PCBs 61 + 70 + 74 +76 PCB-66 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCB-118 PCB-187 PCB-209 Total Monochloro Biphenyls Decachloro Biphenyl	1.29U pg/L 2.71U pg/L 2.90U pg/L 11.9U pg/L 2.46U pg/L 1.29U pg/L 4.00U pg/L 2.02U pg/L 3.16U pg/L 0.964U pg/L 1.43U pg/L 2.32U pg/L 0.643U pg/L 5.89U pg/L 2.38U pg/L 7.08U pg/L 5.96U pg/L 2.52U pg/L 7.80U pg/L 5.58U pg/L 1.33U pg/L 1.71U pg/L 4.00U pg/L 1.71U pg/L	A
DPWG38021	L54125-4	PCB-1 PCB-2 PCB-3 PCB-11 PCB-15 PCB-17 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-31 PCB-32 PCB-37 PCBs 49 + 69 PCBs 50 + 53 PCBs 61 + 70 + 74 +76 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCBs 110 + 115 PCB-118 PCBs 147 + 149 PCB-187 PCB-209 Total Monochloro Biphenyls Total Dichloro Biphenyls Decachloro Biphenyl	1.18U pg/L 0.974U pg/L 2.41U pg/L 10.5U pg/L 1.68U pg/L 2.28U pg/L 2.57U pg/L 4.14U pg/L 1.88U pg/L 2.59U pg/L 0.655U pg/L 1.16U pg/L 2.93U pg/L 0.660U pg/L 10.6U pg/L 4.09U pg/L 15.5U pg/L 10.5U pg/L 15.5U pg/L 9.93U pg/L 9.01U pg/L 2.11U pg/L 1.36U pg/L 4.56U pg/L 12.2U pg/L 1.36U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54125-3	PCB-1 PCB-2 PCB-8 PCB-11 PCB-15 PCB-17 PCBs 20 + 28 PCB-22 PCB-31 PCB-37 PCBs 49 + 69 PCBs 50 + 53 PCBs 61 + 70 + 74 +76 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCB-105 PCBs 110 + 115 PCB-118 PCB-187 PCB-209 Total Monochloro Biphenyls Total Dichloro Biphenyls Decachloro Biphenyl	1.60U pg/L 1.65U pg/L 3.01U pg/L 17.0U pg/L 2.44U pg/L 1.79U pg/L 5.66U pg/L 1.40U pg/L 3.60U pg/L 1.43U pg/L 5.33U pg/L 1.53U pg/L 9.46U pg/L 4.12U pg/L 14.6U pg/L 13.4U pg/L 5.09U pg/L 20.3U pg/L 8.52U pg/L 5.21U pg/L 4.39U pg/L 3.25U pg/L 22.5U pg/L 4.39U pg/L	A
DPWG38021	L54147-1	PCB-1 PCB-2 PCB-3 PCB-8 PCB-11 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-37 PCBs 49 + 69 PCBs 61 + 70 + 74 +76 PCB-84 PCBs 90 + 101 + 113 PCBs 93 + 95 + 98 + 100 + 102 PCBs 110 + 115 PCB-118 PCBs 147 + 149 PCB-187 Total Monochloro Biphenyls Total Dichloro Biphenyls Total Trichloro Biphenyls	1.32U pg/L 0.910U pg/L 2.10U pg/L 2.68U pg/L 9.87U pg/L 3.49U pg/L 1.48U pg/L 1.26U pg/L 2.83U pg/L 0.599U pg/L 2.48U pg/L 5.32U pg/L 1.71U pg/L 6.39U pg/L 5.59U pg/L 9.69U pg/L 4.66U pg/L 3.89U pg/L 1.19U pg/L 4.33U pg/L 12.6U pg/L 9.66U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54147-2	PCB-1	2.00U pg/L	A
		PCB-3	2.85U pg/L	
		PCB-8	4.61U pg/L	
		PCB-11	18.7U pg/L	
		PCB-15	2.66U pg/L	
		PCBs 18 + 30	5.07U pg/L	
		PCBs 20 + 28	6.26U pg/L	
		PCBs 21 + 33	3.52U pg/L	
		PCB-22	2.45U pg/L	
		PCB-31	4.97U pg/L	
		PCB-37	1.79U pg/L	
		PCBs 40 + 41 + 71	3.37U pg/L	
		PCBs 50 + 53	1.12U pg/L	
		PCB-60	1.63U pg/L	
		PCBs 61 + 70 + 74 +76	11.8U pg/L	
		PCB-66	5.09U pg/L	
		PCB-77	1.41U pg/L	
		PCB-84	4.74U pg/L	
		PCBs 90 + 101 + 113	13.0U pg/L	
		PCBs 93 + 95 + 98 + 100 + 102	11.5U pg/L	
		PCBs 110 + 115	16.4U pg/L	
		PCB-118	8.73U pg/L	
		PCBs 147 + 149	8.93U pg/L	
		PCB-187	3.79U pg/L	
		Total Monochloro Biphenyls	4.85U pg/L	
DPWG38021	L54147-3	PCB-1	2.54U pg/L	A
		PCB-3	2.79U pg/L	
		PCB-8	4.28U pg/L	
		PCB-11	17.0U pg/L	
		PCB-15	2.86U pg/L	
		PCB-16	3.89U pg/L	
		PCB-17	3.68U pg/L	
		PCBs 18 + 30	6.70U pg/L	
		PCBs 20 + 28	7.60U pg/L	
		PCB-22	2.47U pg/L	
		PCB-31	5.95U pg/L	
		PCB-32	1.79U pg/L	
		PCBs 40 + 41 + 71	3.35U pg/L	
		PCBs 49 + 69	5.16U pg/L	
		PCBs 50 + 53	1.24U pg/L	
		PCBs 61 + 70 + 74 +76	12.0U pg/L	
		PCB-66	5.65U pg/L	
		PCB-77	1.01U pg/L	
		PCBs 93 + 95 + 98 + 100 + 102	15.3U pg/L	
		PCB-105	5.15U pg/L	
		PCBs 110 + 115	20.0U pg/L	
		PCB-118	9.83U pg/L	
		PCB-187	6.78U pg/L	
		PCB-209	1.64U pg/L	
		Total Monochloro Biphenyls	5.33U pg/L	
		Decachloro Biphenyl	1.64U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54147-4	PCB-2	1.49U pg/L	A
		PCB-8	2.90U pg/L	
		PCB-11	14.8U pg/L	
		PCB-15	3.33U pg/L	
		PCBs 18 + 30	3.30U pg/L	
		PCBs 20 + 28	6.08U pg/L	
		PCBs 21 + 33	2.32U pg/L	
		PCB-22	1.94U pg/L	
		PCB-31	3.87U pg/L	
		PCB-32	0.843U pg/L	
		PCBs 50 + 53	0.772U pg/L	
		PCB-60	1.13U pg/L	
		PCBs 61 + 70 + 74 +76	8.87U pg/L	
		PCB-66	3.61U pg/L	
		PCBs 93 + 95 + 98 + 100 + 102	6.50U pg/L	
		PCB-105	2.39U pg/L	
		PCBs 110 + 115	7.57U pg/L	
		PCBs 147 + 149	5.31U pg/L	
		PCB-187	1.87U pg/L	
		PCB-209	1.58U pg/L	
		Total Monochloro Biphenyls	1.49U pg/L	
		Total Dichloro Biphenyls	21.0U pg/L	
		Decachloro Biphenyl	1.58U pg/L	
DPWG38021	L54148-1	PCB-1	2.06U pg/L	A
		PCB-3	3.27U pg/L	
		PCB-8	4.17U pg/L	
		PCB-11	15.2U pg/L	
		PCB-15	3.97U pg/L	
		PCB-16	1.92U pg/L	
		PCB-17	2.43U pg/L	
		PCBs 18 + 30	5.44U pg/L	
		PCBs 20 + 28	7.65U pg/L	
		PCBs 21 + 33	3.12U pg/L	
		PCB-22	2.96U pg/L	
		PCB-31	3.92U pg/L	
		PCB-32	1.48U pg/L	
		PCB-37	3.33U pg/L	
		PCBs 40 + 41 + 71	3.57U pg/L	
		PCB-60	1.87U pg/L	
		PCBs 61 + 70 + 74 +76	10.9U pg/L	
		PCB-66	5.28U pg/L	
		PCB-77	2.18U pg/L	
		PCBs 90 + 101 + 113	11.5U pg/L	
		PCBs 93 + 95 + 98 + 100 + 102	13.6U pg/L	
		PCBs 110 + 115	23.8U pg/L	
		PCB-118	11.5U pg/L	
		PCB-187	5.72U pg/L	
		Total Monochloro Biphenyls	5.33U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54148-2	PCB-1 PCB-2 PCB-3 PCB-8 PCB-11 PCB-16 PCB-17 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCB-37 PCBs 40 + 41 + 71 PCB-60 PCBs 61 + 70 + 74 +76 PCB-66 PCB-77 PCB-209 Total Monochloro Biphenyls Decachloro Biphenyl	2.21U pg/L 1.61U pg/L 3.66U pg/L 6.37U pg/L 34.5U pg/L 4.31U pg/L 4.84U pg/L 8.90U pg/L 14.2U pg/L 6.51U pg/L 5.46U pg/L 10.2U pg/L 3.17U pg/L 3.83U pg/L 7.47U pg/L 3.64U pg/L 27.1U pg/L 11.6U pg/L 2.70U pg/L 2.36U pg/L 7.48U pg/L 2.36U pg/L	A
DPWG38021	L54149-1	PCB-1 PCB-2 PCB-3 PCB-7 PCB-8 PCB-11 PCBs 18 + 30 PCBs 20 + 28 PCBs 21 + 33 PCB-22 PCB-31 PCB-32 PCBs 49 + 69 PCBs 50 + 53 PCBs 61 + 70 + 74 +76 PCB-66 PCBs 90 + 101 + 113 PCB-105 PCBs 110 + 115 PCB-118 PCBs 147 + 149 PCB-187 Total Monochloro Biphenyls Total Dichloro Biphenyls	2.21U pg/L 1.79U pg/L 3.27U pg/L 5.06U pg/L 3.51U pg/L 14.6U pg/L 5.63U pg/L 6.86U pg/L 2.69U pg/L 2.90U pg/L 5.15U pg/L 1.56U pg/L 4.22U pg/L 1.15U pg/L 11.5U pg/L 4.17U pg/L 7.90U pg/L 3.21U pg/L 12.5U pg/L 7.11U pg/L 5.87U pg/L 2.57U pg/L 7.27U pg/L 23.2U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG38021	L54149-2	PCB-1	2.49U pg/L	A
		PCB-2	2.30U pg/L	
		PCB-11	23.1U pg/L	
		PCB-15	4.06U pg/L	
		PCB-16	3.51U pg/L	
		PCB-17	4.40U pg/L	
		PCBs 18 + 30	7.37U pg/L	
		PCBs 20 + 28	11.7U pg/L	
		PCBs 21 + 33	5.38U pg/L	
		PCB-22	4.06U pg/L	
		PCB-31	7.93U pg/L	
		PCB-32	2.05U pg/L	
		PCB-37	2.76U pg/L	
		PCBs 40 + 41 + 71	5.29U pg/L	
		PCBs 49 + 69	6.50U pg/L	
		PCBs 50 + 53	2.21U pg/L	
		PCB-60	1.83U pg/L	
		PCBs 61 + 70 + 74 +76	17.1U pg/L	
		PCB-66	7.11U pg/L	
		PCB-77	1.35U pg/L	
		PCBs 90 + 101 + 113	19.8U pg/L	
		PCB-105	5.72U pg/L	
		PCBs 110 + 115	24.8U pg/L	
		PCB-118	12.9U pg/L	
		PCB-209	2.52U pg/L	
		Total Monochloro Biphenyls	4.79U pg/L	
		Total Dichloro Biphenyls	27.2U pg/L	
		Decachloro Biphenyl	2.52U pg/L	

LDC #: 26805B31 **VALIDATION COMPLETENESS WORKSHEET** Date: 12/30/11

SDG #: DPWG38021 Level III Page: 1 of 1

Laboratory: Analytical ~~Perspectives~~ Services Ltd AXYS Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/6 - 9/15/11 cooler temp 9°C (text)
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	20%
IV.	Routine calibration/~~ICV~~	A	CCV ≤ 30/50%
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates /DUP	N/A	
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	SW	
X.	Target compound identifications	N	
XI.	Compound quantitationRL/LOQ/LODs	N	
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: AQ

1	L54090-1	11	L54147-1	21	WG37726-101	31	
2	L54090-2	12	L54147-2	22		32	
3	L54090-3	13	L54147-3	23		33	
4	L54117-1	14	L54147-4	24		34	
5	L54117-2	15	L54148-1	25		35	
6	L54117-3	16	L54148-2	26		36	
7	L54117-4	17	L54149-1	27		37	
8	L54125-1	18	L54149-2	28		38	
9	L54125-4	19	L54117-1DUP	29		39	
10	L54125-3	20		30		40	

LDC #: 26805B31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [handwritten initials]
2nd Reviewer: [handwritten initials]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated? If yes, please see qualification below.

Blank extraction date: 9/23/11 **Blank analysis date:** 10/04/11
Conc. units: pg/L **Associated samples:** All

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	1	2	3	4	19	5	6	7
PCB 1	1.85	9.25	1.99/U		2.31/U	1.46/U	1.61/U	1.74/U	1.52/U	1.60/U
PCB 2	1.36	6.8	1.19/U	1.04/U		1.40/U	1.24/U	1.00/U	1.00/U	1.20/U
PCB 3	3.12	15.6	3.48/U		4.00/U	3.01/U	3.17/U		2.33/U	2.97/U
PCB 7	15.5	77.5		3.49/U	3.08/U		2.45/U		1.51/U	
PCB 8	1.63	8.15			3.70/U	4.52/U	4.74/U	4.13/U	3.83/U	4.91/U
PCB 11	9.50	47.5	19.6/U	20.0/U	12.6/U	12.2/U	13.7/U	14.0/U	12.9/U	30.7/U
PCB 15	2.20	11	7.17/U		3.90/U	3.16/U	4.00/U	2.55/U	2.37/U	2.58/U
PCB 16	0.874	4.37		2.08/U	2.14/U	2.46/U	2.24/U			2.75/U
PCB 17	0.669	3.345		2.67/U	2.30/U	2.54/U	2.65/U			3.10/U
PCBs 18 + 30	2.03	10.15			3.54/U	4.02/U		5.45/U	4.41/U	5.00/U
PCBs 20 + 28	4.49	22.45	20.3/U		6.45/U	5.73/U	7.75/U	6.51/U	5.65/U	7.93/U
PCBs 21 + 33	1.50	7.5		3.17/U	2.48/U	2.64/U	3.31/U	2.28/U	2.11/U	4.93/U
PCB 22	1.49	7.45	6.57/U	2.54/U	1.38/U	1.69/U	2.25/U	2.47/U	1.74/U	
PCB 31	2.55	12.75			4.17/U	4.15/U	4.82/U	4.96/U	3.72/U	6.69/U
PCB 32	0.827	4.135	3.93/U	1.38/U	1.19/U	0.792/U	1.74/U	1.44/U	1.53/U	1.55/U
PCB 37	1.22	6.1	6.10/U		2.04/U	1.33/U	1.40/U	1.26/U	1.12/U	3.40/U
PCBs 40 + 41 + 71	1.94	9.7	4.95/U		2.69/U	2.34/U		2.11/U	2.70/U	4.32/U
PCBs 45 + 51	0.881	4.405								
PCBs 49 + 69	1.66	8.3			4.73/U	2.84/U	4.06/U	3.24/U	3.71/U	
PCBs 50 + 53	0.542	2.71	1.14/U		1.10/U		1.14/U		1.06/U	
PCB 60	0.820	4.1	3.42/U	1.83/U	0.704/U			0.940/U		2.71/U

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	1	2	3	4	19	5	6	7
PCBs 61 + 70 + 74 +76	6.26	31.3		9.75/U	8.48/U	6.57/U	8.72/U	7.82/U	7.93/U	19.9/U
PCB 66	2.49	12.45				2.60/U	3.92/U	3.62/U	3.14/U	7.88/U
PCB 77	0.655	3.275	2.75/U		1.36/U	0.835/U	0.604/U			2.40/U
PCB 84	1.30	6.5	5.45/U	2.67/U		1.72/U	2.79/U		3.66/U	5.51/U
PCBs 90 + 101 + 113	5.01	25.05			12.2/U	6.62/U	6.69/U	6.73/U		18.2/U
PCBs 93 + 95 + 98 + 100 + 102	3.51	17.55			11.1/U	6.24/U	6.03/U	6.48/U	10.4/U	15.2/U
PCB 105	1.74	8.7			3.67/U	2.87/U	3.17/U	2.92/U	3.77/U	
PCBs 110 + 115	5.22	26.1			14.8/U	7.98/U	8.54/U	9.18/U	13.7/U	22.8/U
PCB 118	3.36	16.8			8.89/U	5.73/U			7.62/U	15.7/U
PCBs 147 + 149	2.19	10.95	10.1/U			4.89/U		4.07/U	9.96/U	
PCB 187	1.49	7.45			5.79/U	1.86/U		1.43/U	4.40/U	4.89/U
PCB 209	1.29	6.45				1.56/U				2.66/U
Total Monochloro Biphenyls	6.33	31.65	6.66/U		6.31/U	5.87/U	6.02/U	2.74/U	4.85/U	5.77/U
Total Dichloro Biphenyls	28.8	144								
Total Trichloro Biphenyls	15.7	78.5								
Total Tetrachloro Biphenyls	15.2	76								
Total Pentachloro Biphenyls	20.1	100.5								
Total Hexachloro Biphenyls	2.19	10.95								
Total Heptachloro Biphenyls	1.49	7.45								
Decachloro Biphenyl	1.29	6.45				1.56/U				2.66/U
Total PCBs	91.2	456								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26805B31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated? If yes, please see qualification below.

Blank extraction date: 9/23/11 **Blank analysis date:** 10/04/11
Conc. units: pg/L **Associated samples:** All

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	8	9	10	11	12	13	14	15
PCB 1	1.85	9.25	1.29/U	1.18/U	1.60/U	1.32/U	2.00/U	2.54/U		2.06/U
PCB 2	1.36	6.8		0.974/U	1.65/U	0.910/U			1.49/U	
PCB 3	3.12	15.6	2.71/U	2.41/U		2.10/U	2.85/U	2.79/U		3.27/U
PCB 7	15.5	77.5								
PCB 8	1.63	8.15	2.90/U		3.01/U	2.68/U	4.61/U	4.28/U	2.90/U	4.17/U
PCB 11	9.50	47.5	11.9/U	10.5/U	17.0/U	9.87/U	18.7/U	17.0/U	14.8/U	15.2/U
PCB 15	2.20	11	2.46/U	1.68/U	2.44/U		2.66/U	2.86/U	3.33/U	3.97/U
PCB 16	0.874	4.37						3.89/U		1.92/U
PCB 17	0.669	3.345	1.29/U	2.28/U	1.79/U			3.68/U		2.43/U
PCBs 18 + 30	2.03	10.15		2.57/U			5.07/U	6.70/U	3.30/U	5.44/U
PCBs 20 + 28	4.49	22.45	4.00/U	4.14/U	5.66/U	3.49/U	6.26/U	7.60/U	6.08/U	7.65/U
PCBs 21 + 33	1.50	7.5	2.02/U	1.88/U		1.48/U	3.52/U		2.32/U	3.12/U
PCB 22	1.49	7.45			1.40/U	1.26/U	2.45/U	2.47/U	1.94/U	2.96/U
PCB 31	2.55	12.75	3.16/U	2.59/U	3.60/U	2.83/U	4.97/U	5.95/U	3.87/U	3.92/U
PCB 32	0.827	4.135	0.964/U	0.655/U				1.79/U	0.843/U	1.48/U
PCB 37	1.22	6.1		1.16/U	1.43/U	0.599/U	1.79/U			3.33/U
PCBs 40 + 41 + 71	1.94	9.7	1.43/U				3.37/U	3.35/U		3.57/U
PCBs 45 + 51	0.881	4.405								
PCBs 49 + 69	1.66	8.3	2.32/U	2.93/U	5.33/U	2.48/U		5.16/U		
PCBs 50 + 53	0.542	2.71		0.660/U	1.53/U		1.12/U	1.24/U	0.772/U	
PCB 60	0.820	4.1	0.643/U				1.63/U		1.13/U	1.87/U

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	8	9	10	11	12	13	14	15
PCBs 61 + 70 + 74 +76	6.26	31.3	5.89/U	10.6/U	9.46/U	5.32/U	11.8/U	12.0/U	8.87/U	10.9/U
PCB 66	2.49	12.45	2.38/U				5.09/U	5.65/U	3.61/U	5.28/U
PCB 77	0.655	3.275					1.41/U	1.01/U		2.18/U
PCB 84	1.30	6.5		4.09/U	4.12/U	1.71/U	4.74/U			
PCBs 90 + 101 + 113	5.01	25.05	7.08/U	15.5/U	14.6/U	6.39/U	13.0/U			11.5/U
PCBs 93 + 95 + 98 + 100 + 102	3.51	17.55	5.96/U	10.5/U	13.4/U	5.59/U	11.5/U	15.3/U	6.50/U	13.6/U
PCB 105	1.74	8.7	2.52/U		5.09/U			5.15/U	2.39/U	
PCBs 110 + 115	5.22	26.1	7.80/U	15.5/U	20.3/U	9.69/U	16.4/U	20.0/U	7.57/U	23.8/U
PCB 118	3.36	16.8	5.58/U	9.93/U	8.52/U	4.66/U	8.73/U	9.83/U		11.5/U
PCBs 147 + 149	2.19	10.95		9.01/U		3.89/U	8.93/U		5.31/U	
PCB 187	1.49	7.45	1.33/U	2.11/U	5.21/U	1.19/U	3.79/U	6.78/U	1.87/U	5.72/U
PCB 209	1.29	6.45	1.71/U	1.36/U	4.39/U			1.64/U	1.58/U	
Total Monochloro Biphenyls	6.33	31.65	4.00/U	4.56/U	3.25/U	4.33/U	4.85/U	5.33/U	1.49/U	5.33/U
Total Dichloro Biphenyls	28.8	144		12.2/U	22.5/U	12.6/U			21.0/U	
Total Trichloro Biphenyls	15.7	78.5				9.66/U				
Total Tetrachloro Biphenyls	15.2	76								
Total Pentachloro Biphenyls	20.1	100.5								
Total Hexachloro Biphenyls	2.19	10.95								
Total Heptachloro Biphenyls	1.49	7.45								
Decachloro Biphenyl	1.29	6.45	1.71/U	1.36/U	4.39/U			1.64/U	1.58/U	
Total PCBs	91.2	456								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26805B31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: R
2nd Reviewer: Q

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated? If yes, please see qualification below.
Blank extraction date: 9/23/11 **Blank analysis date:** 10/04/11
Conc. units: pg/L **Associated samples:** All

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	16	17	18					
PCB 1	1.85	9.25	2.21/U	2.21/U	2.49/U					
PCB 2	1.36	6.8	1.61/U	1.79/U	2.30/U					
PCB 3	3.12	15.6	3.66/U	3.27/U						
PCB 7	15.5	77.5		5.06/U						
PCB 8	1.63	8.15	6.37/U	3.51/U						
PCB 11	9.50	47.5	34.5/U	14.6/U	23.1/U					
PCB 15	2.20	11			4.06/U					
PCB 16	0.874	4.37	4.31/U		3.51/U					
PCB 17	0.669	3.345	4.84/U		4.40/U					
PCBs 18 + 30	2.03	10.15	8.90/U	5.63/U	7.37/U					
PCBs 20 + 28	4.49	22.45	14.2/U	6.86/U	11.7/U					
PCBs 21 + 33	1.50	7.5	6.51/U	2.69/U	5.38/U					
PCB 22	1.49	7.45	5.46/U	2.90/U	4.06/U					
PCB 31	2.55	12.75	10.2/U	5.15/U	7.93/U					
PCB 32	0.827	4.135	3.17/U	1.56/U	2.05/U					
PCB 37	1.22	6.1	3.83/U		2.76/U					
PCBs 40 + 41 + 71	1.94	9.7	7.47/U		5.29/U					
PCBs 45 + 51	0.881	4.405								
PCBs 49 + 69	1.66	8.3		4.22/U	6.50/U					
PCBs 50 + 53	0.542	2.71		1.15/U	2.21/U					
PCB 60	0.820	4.1	3.64/U		1.83/U					

Compound	Blank ID	Sample Identification								
	WG37726-101	5x	16	17	18					
PCBs 61 + 70 + 74 +76	6.26	31.3	27.1/U	11.5/U	17.1/U					
PCB 66	2.49	12.45	11.6/U	4.17/U	7.11/U					
PCB 77	0.655	3.275	2.70/U		1.35/U					
PCB 84	1.30	6.5								
PCBs 90 + 101 + 113	5.01	25.05		7.90/U	19.8/U					
PCBs 93 + 95 + 98 + 100 + 102	3.51	17.55								
PCB 105	1.74	8.7		3.21/U	5.72/U					
PCBs 110 + 115	5.22	26.1		12.5/U	24.8/U					
PCB 118	3.36	16.8		7.11/U	12.9/U					
PCBs 147 + 149	2.19	10.95		5.87/U						
PCB 187	1.49	7.45		2.57/U						
PCB 209	1.29	6.45	2.36/U		2.52/U					
Total Monochloro Biphenyls	6.33	31.65	7.48/U	7.27/U	4.79/U					
Total Dichloro Biphenyls	28.8	144		23.2/U	27.2/U					
Total Trichloro Biphenyls	15.7	78.5								
Total Tetrachloro Biphenyls	15.2	76								
Total Pentachloro Biphenyls	20.1	100.5								
Total Hexachloro Biphenyls	2.19	10.95								
Total Heptachloro Biphenyls	1.49	7.45								
Decachloro Biphenyl	1.29	6.45	2.36/U		2.52/U					
Total PCBs	91.2	456								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26805B31

VALIDATION FINDINGS WORKSHEET
Internal Standards

Page: 1 of 1
Reviewer: q
2nd Reviewer: q

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A	Are all internal standard recoveries were within the 25-150% criteria?
Y N N/A	Was the Ion Abundance Ratio within criteria?
Y N N/A	Was the S/N ratio all internal standard peaks ≥ 10?

#	Date	Lab ID/Reference	Internal Standard	% Recovery (Limit: 25-150%)		Qualifications
		15	13C-PCB 155	20.9	(25-150)	J/UJ/P (see attached)
			13C-PCB 188	23.9	(↓)	↓
					( )	
					( )	+ Total Hexachloro Biphenyls
					( )	+ Total Heptachloro Biphenyls
					( )	z
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COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,2',4,4',6-PeCB	100	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5,5'-PeCB	101	90 + 101 + 113	C90				
2,2',4,5,6'-PeCB	102	93 + 95 + 98 + 100 + 102	C93				
2,2',4,5',6-PeCB	103		U		0.599 (S)		
2,2',4,6,6'-PeCB	104		U		0.559 (Q)		
2,3,3',4,4'-PeCB	105		K B J	5.47	0.559 (Q)	0.93	1.000
2,3,3',4,5-PeCB	106		U		0.775 (S)		
2,3,3',4',5-PeCB	107	107 + 124	C U		0.868 (S)		
2,3,3',4,5'-PeCB	108	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3,3',4,6-PeCB	109		K J	1.01	0.853 (S)	0.41	0.997
2,3,3',4',6-PeCB	110	110 + 115	C B	23.8	0.559 (Q)	1.46	0.925
2,3,3',5,5'-PeCB	111		U		0.559 (Q)		
2,3,3',5,6-PeCB	112		U		0.559 (Q)		
2,3,3',5',6-PeCB	113	90 + 101 + 113	C90				
2,3,4,4',5-PeCB	114		J	1.66	0.771 (S)	1.50	1.000
2,3,4,4',6-PeCB	115	110 + 115	C110				
2,3,4,5,6-PeCB	116	85 + 116 + 117	C85				
2,3,4',5,6-PeCB	117	85 + 116 + 117	C85				
2,3',4,4',5-PeCB	118		B J	11.5	0.814 (S)	1.35	1.001
2,3',4,4',6-PeCB	119	86 + 87 + 97 + 108 + 119 + 125	C86				
2,3',4,5,5'-PeCB	120		U		0.559 (Q)		
2,3',4,5',6-PeCB	121		U		0.559 (Q)		
2',3,3',4,5-PeCB	122		U		0.893 (S)		
2',3,4,4',5-PeCB	123		J	1.11	0.854 (S)	1.65	1.000
2',3,4,5,5'-PeCB	124	107 + 124	C107				
2',3,4,5,6'-PeCB	125	86 + 87 + 97 + 108 + 119 + 125	C86				
3,3',4,4',5-PeCB	126		J	1.47	0.631 (S)	1.70	1.000
3,3',4,5,5'-PeCB	127		U		0.820 (S)		
2,2',3,3',4,4'-HxCB	128	128 + 166	C K J	3.55	0.627 (S)	0.96	0.959
2,2',3,3',4,5-HxCB	129	129 + 138 + 160 + 163	C K B J	16.4	0.630 (S)	0.89	0.928
2,2',3,3',4,5'-HxCB	130		K B J	1.26	0.777 (S)	1.94	0.913
2,2',3,3',4,6-HxCB	131		U		0.701 (S)		
2,2',3,3',4,6'-HxCB	132		K J	8.19	0.736 (S)	1.01	1.176
2,2',3,3',5,5'-HxCB	133		U		0.676 (S)		
2,2',3,3',5,6-HxCB	134	134 + 143	C K J	1.53	0.722 (S)	3.50	1.141
2,2',3,3',5,6'-HxCB	135	135 + 151 + 154	C J	5.21	0.559 (Q)	1.14	1.105
2,2',3,3',6,6'-HxCB	136		K J	2.27	0.559 (Q)	1.57	1.025
2,2',3,4,4',5-HxCB	137		K J	1.11	0.764 (S)	2.55	0.918
2,2',3,4,4',5'-HxCB	138	129 + 138 + 160 + 163	C129				
2,2',3,4,4',6-HxCB	139	139 + 140	C U		0.665 (S)		
2,2',3,4,4',6'-HxCB	140	139 + 140	C139				
2,2',3,4,5,5'-HxCB	141		J	2.24	0.645 (S)	1.24	0.903
2,2',3,4,5,6-HxCB	142		U		0.732 (S)		
2,2',3,4,5,6'-HxCB	143	134 + 143	C134				
2,2',3,4,5',6-HxCB	144		K J	1.22	0.559 (Q)	0.92	1.122
2,2',3,4,6,6'-HxCB	145		U		0.559 (Q)		
2,2',3,4',5,5'-HxCB	146		K J	0.876	0.627 (S)	0.36	0.884
2,2',3,4',5,6-HxCB	147	147 + 149	C B J	11.7	0.658 (S)	1.31	1.134
2,2',3,4',5,6'-HxCB	148		U		0.559 (Q)		
2,2',3,4',5',6-HxCB	149	147 + 149	C147				
2,2',3,4',6,6'-HxCB	150		U		0.559 (Q)		
2,2',3,5,5',6-HxCB	151	~~135 + 151 + 154~~	C135				
2,2',3,5,6,6'-HxCB	152		U		0.559 (Q)		
2,2',4,4',5,5'-HxCB	153	153 + 168	C B J	7.87	0.559 (Q)	1.38	0.898
2,2',4,4',5,6'-HxCB	154	135 + 151 + 154	C135				
2,2',4,4',6,6'-HxCB	155		K J	1.60	0.572 (S)	0.62	1.001
2,3,3',4,4',5-HxCB	156	156 + 157	C B J	4.20	0.559 (Q)	1.09	1.000
2,3,3',4,4',5'-HxCB	157	156 + 157	C156				
2,3,3',4,4',6-HxCB	158		K J	1.23	0.559 (Q)	1.87	0.937
2,3,3',4,5,5'-HxCB	159		U		0.559 (Q)		
2,3,3',4,5,6-HxCB	160	129 + 138 + 160 + 163	C129				

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	IUPAC NO.	CO-ELUTIONS	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	ION ABUND. RATIO	RRT
2,3,3',4,5',6-HxCB	161		U		0.559 (Q)		
2,3,3',4',5,5'-HxCB	162		U		0.567 (S)		
2,3,3',4',5,6-HxCB	163	129 + 138 + 160 + 163	C129				
2,3,3',4',5',6-HxCB	164		J	1.08	0.559 (Q)	1.36	0.921
2,3,3',5,5',6-HxCB	165		U		0.591 (S)		
2,3,4,4',5,6-HxCB	166	128 + 166	C128				
2,3',4,4',5,5'-HxCB	167		J	2.60	0.583 (S)	1.23	1.000
2,3',4,4',5',6-HxCB	168	153 + 168	C153				
3,3',4,4',5,5'-HxCB	169		J	1.14	0.559 (Q)	1.09	1.000
2,2',3,3',4,4',5-HpCB	170		B J	7.77	0.927 (S)	1.05	1.001
2,2',3,3',4,4',6-HpCB	~~171~~	171 + 173	C K J	1.56	0.888 (S)	1.63	1.163
2,2',3,3',4,5,5'-HpCB	172		U		0.895 (S)		
2,2',3,3',4,5,6-HpCB	173	171 + 173	C171				
2,2',3,3',4,5,6'-HpCB	174		B J	2.85	0.788 (S)	0.91	1.134
2,2',3,3',4,5',6-HpCB	175		U		0.790 (S)		
2,2',3,3',4,6,6'-HpCB	176		K J	0.764	0.604 (S)	6.37	1.034
2,2',3,3',4',5,6-HpCB	177		J	2.15	0.809 (S)	1.04	1.146
2,2',3,3',5,5',6-HpCB	178		U		0.790 (S)		
2,2',3,3',5,6,6'-HpCB	179		K J	1.92	0.584 (S)	0.42	1.010
2,2',3,4,4',5,5'-HpCB	180	180 + 193	C B J	6.12	0.751 (S)	0.97	1.000
2,2',3,4,4',5,6-HpCB	181		U		0.850 (S)		
2,2',3,4,4',5,6'-HpCB	182		J	2.44	0.789 (S)	1.20	1.116
2,2',3,4,4',5',6-HpCB	183	183 + 185	C B J	2.67	0.819 (S)	0.96	1.128
2,2',3,4,4',6,6'-HpCB	184		U		0.577 (S)		
2,2',3,4,5,5',6-HpCB	185	183 + 185	C183				
2,2',3,4,5,6,6'-HpCB	186		U		0.639 (S)		
2,2',3,4',5,5',6-HpCB	187		B J	5.72	0.748 (S)	0.97	1.110
2,2',3,4',5,6,6'-HpCB	188		U		0.585 (S)		
2,3,3',4,4',5,5'-HpCB	189		J	2.08	0.561 (S)	1.16	1.000
2,3,3',4,4',5,6-HpCB	190		K J	0.942	0.730 (S)	1.59	0.947
2,3,3',4,4',5',6-HpCB	191		U		0.695 (S)		
2,3,3',4,5,5',6-HpCB	192		U		0.781 (S)		
2,3,3',4',5,5',6-HpCB	193	180 + 193	C180				
2,2',3,3',4,4',5,5'-OcCB	194		K B J	2.42	0.774 (S)	1.29	0.991
2,2',3,3',4,4',5,6-OcCB	195		U		0.830 (S)		
2,2',3,3',4,4',5,6'-OcCB	196		K J	1.85	0.747 (S)	1.13	0.916
2,2',3,3',4,4',6,6'-OcCB	197	197 + 200	C K J	0.631	0.559 (Q)	4.52	1.044
2,2',3,3',4,5,5',6-OcCB	198	198 + 199	C K B J	2.65	0.761 (S)	0.62	1.115
2,2',3,3',4,5,5',6'-OcCB	199	198 + 199	C198				
2,2',3,3',4,5,6,6'-OcCB	200	197 + 200	C197				
2,2',3,3',4,5',6,6'-OcCB	201		U		0.559 (Q)		
2,2',3,3',5,5',6,6'-OcCB	202		K J	1.94	0.559 (Q)	1.20	1.000
2,2',3,4,4',5,5',6-OcCB	203		K B J	1.32	0.721 (S)	0.74	0.919
2,2',3,4,4',5,6,6'-OcCB	204		U		0.559 (Q)		
2,3,3',4,4',5,5',6-OcCB	205		K J	1.65	0.604 (S)	1.25	1.000
2,2',3,3',4,4',5,5',6-NoCB	206		U		2.28 (S)		
2,2',3,3',4,4',5,6,6'-NoCB	207		U		2.08 (S)		
2,2',3,3',4,5,5',6,6'-NoCB	208		U		2.05 (S)		
2,2',3,3',4,4',5,5',6,6'-DeCB	209		K B J	3.15	0.828 (S)	0.42	1.000

(1) Where applicable, custom lab flags have been used on this report; U = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than lowest calibration equivalent; C = co-eluting congener.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = contract defined limit.

These data are validated and reported as accurate and in accord with AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: __________Kirsten Anderson_________

For Axys Internal Use Only [XSL Template: Form16681A.xsl; Created: 20-Oct-2011 13:14:40; Application: XMLTransformer-1.11.11;
Report Filename: 1668_PCB1668_PCBTF_L16921-15_Form1A_PB1B_235AS7_SJ1367778.html; Workgroup: WG37726; Design ID: 304]

LDC #: 26805B31

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: K
2nd Reviewer: R

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Compound	Finding	Associated Samples	Qualifications
		All	EMPC results flagged "K"		U

Comments: See sample calculation verification worksheet for recalculations

Laboratory Data Consultants, Inc.

7750 El Camino Real, Ste. 2L Carlsbad, CA 92009

Phone 760.634.0437 **Web** www.lab-data.com **Fax** 760.634.0439

King County Environmental Laboratory
322 W. Ewing Street
Seattle WA 98119
ATTN: Mr. Fritz Grothkopp

February 27, 2013

SUBJECT: LDW Green River Inputs, Data Validation

Dear Mr. Grothkopp,

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on September 6, 2012. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 28363-3:

SDG #	**Fraction**
DPWG39655 & DPWG40324	Polychlorinated Biphenyls as Congeners

The data validation was performed under EPA Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Green River Loading Study SAP, Final , October 2011
- EPA Region 10 SOP for the Validation of Polychlorinated Dibensodioxin (PCDD) and Polychlorinated Dibenzofuran (PCDF) Data, Revision 2.0, January 1996

Please feel free to contact us if you have any questions.

Sincerely,

Stella S. Cuenco
Operations Manager/Senior Chemist

0 Pages CD EDD RTC CD

Attachment 1

III LDC #28363 (King County - Seattle WA / Lower Duwamish Water) Project

LDC	SDG#	DATE REC'D	(3) DATE DUE	Dioxins (1613B)		PCB Cong (1668A)																													
Matrix: Water/Wipe				W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	DPWG38582	09/06/12	09/27/12	10	0	-	-																												
B	DPWG38585	09/06/12	09/27/12	9	0	-	-																												
C	DPWG38711	09/06/12	09/27/12	-	-	10	0																												
D	DPWG38948	09/06/12	09/27/12	-	-	9	0																												
E	DPWG39582	09/06/12	09/27/12	10	0	-	-																												
F	DPWG39854	09/06/12	09/27/12	11	0	-	-																												
G	DPWG39652	09/06/12	09/27/12	-	-	10	0																												
H	DPWG39655	09/06/12	09/27/12	-	-	19	0																												
I	DPWG39744	09/06/12	09/27/12	-	-	11	0																												
J	DPWG40324	09/06/12	09/27/12	-	-	15	0																												
K	DPWG40413	09/06/12	09/27/12	13	0	-	-																												
L	DPWG40529	09/06/12	09/27/12	-	-	13	0																												
Total	A/SC			53	0	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140

Shaded cells indicate Level IV validation (all other cells are Level II validation). These sample counts do not include MS/MSD, and DUPs

LDC Report# 28363H31

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Lower Duwamish Waterway

Collection Date: November 16, 2011 through March 5, 2012

LDC Report Date: September 25, 2012

Matrix: Water

Parameters: Polychlorinated Biphenyls as Congeners

Validation Level: EPA Level III

Laboratory: AXYS Analytical Services, Ltd.

Sample Delivery Group (SDG): DPWG39655

Sample Identification

L54681-1
L54681-2
L54681-3
L54681-4
L54686-1
L54686-2
L54686-3
L54686-4
L54686-5
L54686-6
L55077-1
L55077-2
L55077-4
L55077-6
L55177-1
L55177-2
L55177-4
L55177-5
L55177-6
L54686-4DUP

Introduction

This data review covers 20 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1668A for Polychlorinated Biphenyls as Congeners.

This review follows the Green River Loading Study Sampling and Analysis Plan (Final October 2011) and EPA Region 10 SOP for the Validation of Polychlorinated Dibenzodioxin (PCDD) and Polychlorinated Dibenzofuran (PCDF) Data (Revision 2.0, January 31, 1996).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U — Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J — Indicates an estimated value.
  - J1 — Blank Contamination: Indicates possible high bias and/or false positives.
  - J2 — Calibration Range exceeded: Indicates possible low bias.
  - J3 — Holding times not met: Indicates low bias for most analytes.
  - J4 — Other QC parameters outside control limits: bias not readily determined.
  - J5 — Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
  - J6 — Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.
- R — Quality control indicates the data is not usable.
- NJ — Presumptive evidence of presence of the compound at an estimated quantity.
- UJ — Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A — Indicates the finding is based upon technical validation criteria.
- P — Indicates the finding is related to a protocol/contractual deviation.
- None — Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all congeners. The chromatographic resolution between the congeners PCB-23 and PCB-34 and congeners PCB-182 and PCB-187 was resolved with a valley of less than or equal to 40%.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

The ion abundance ratios for all PCBs were within method criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 30.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The ion abundance ratios for all PCBs were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyls as congeners contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
WG39377-101	3/12/12	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 PCB-20/28 PCB-21	2.00 pg/L 2.27 pg/L 6.94 pg/L 5.60 pg/L 4.14 pg/L 1.71 pg/L 0.844 pg/L	All samples in SDG DPWG39655

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
WG39377-101 (continued)	3/12/12	PCB-31 PCB-44/47/65 PCB-52 PCB-64 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-129/138/160/163 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Tetrachlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls Total Heptachlorobiphenyls Total PCBs	1.28 pg/L 2.41 pg/L 2.08 pg/L 0.602 pg/L 0.790 pg/L 1.82 pg/L 1.43 pg/L 1.39 pg/L 1.31 pg/L 0.567 pg/L 11.2 pg/L 9.74 pg/L 3.83 pg/L 5.88 pg/L 4.64 pg/L 1.31 pg/L 0.567 pg/L 37.2 pg/L	All samples in SDG DPWG39655

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L54681-1	PCB-1 PCB-2 PCB-3 PCB-20/28 PCB-21 PCB-31 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.35 pg/L 3.00 pg/L 8.03 pg/L 4.59 pg/L 1.89 pg/L 2.41 pg/L 13.4 pg/L 10.1 pg/L	2.35U pg/L 3.00U pg/L 8.03U pg/L 4.59U pg/L 1.89U pg/L 2.41U pg/L 13.4U pg/L 10.1U pg/L
L54681-2	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-129/138/160/163 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.33 pg/L 2.72 pg/L 8.26 pg/L 5.71 pg/L 6.93 pg/L 1.56 pg/L 3.22 pg/L 5.86 pg/L 2.76 pg/L 5.03 pg/L 5.29 pg/L 4.51 pg/L 5.21 pg/L 1.84 pg/L 13.3 pg/L 14.3 pg/L	2.33U pg/L 2.72U pg/L 8.26U pg/L 5.71U pg/L 6.93U pg/L 1.56U pg/L 3.22U pg/L 5.86U pg/L 2.76U pg/L 5.03U pg/L 5.29U pg/L 4.51U pg/L 5.21U pg/L 1.84U pg/L 13.3U pg/L 14.3U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54681-3	PCB-1	2.77 pg/L	2.77U pg/L
	PCB-2	3.38 pg/L	3.38U pg/L
	PCB-3	9.46 pg/L	9.46U pg/L
	PCB-15	5.42 pg/L	5.42U pg/L
	PCB-20/28	4.90 pg/L	4.90U pg/L
	PCB-21	1.86 pg/L	1.86U pg/L
	PCB-31	2.07 pg/L	2.07U pg/L
	PCB-52	6.81 pg/L	6.81U pg/L
	PCB-64	1.42 pg/L	1.42U pg/L
	PCB-66	2.77 pg/L	2.77U pg/L
	Total Monochlorobiphenyls	15.6 pg/L	15.6U pg/L
	Total Dichlorobiphenyls	11.8 pg/L	11.8U pg/L
L54681-4	PCB-1	2.30 pg/L	2.30U pg/L
	PCB-2	2.44 pg/L	2.44U pg/L
	PCB-3	7.90 pg/L	7.90U pg/L
	PCB-20/28	3.45 pg/L	3.45U pg/L
	PCB-21	1.08 pg/L	1.08U pg/L
	PCB-31	2.32 pg/L	2.32U pg/L
	PCB-52	7.67 pg/L	7.67U pg/L
	PCB-64	1.77 pg/L	1.77U pg/L
	PCB-66	2.90 pg/L	2.90U pg/L
	Total Monochlorobiphenyls	12.6 pg/L	12.6U pg/L
	Total Dichlorobiphenyls	6.99 pg/L	6.99U pg/L
	Total Trichlorobiphenyls	8.65 pg/L	8.65U pg/L
L54686-1	PCB-1	2.62 pg/L	2.62U pg/L
	PCB-2	2.96 pg/L	2.96U pg/L
	PCB-3	8.93 pg/L	8.93U pg/L
	PCB-20/28	4.90 pg/L	4.90U pg/L
	PCB-21	1.70 pg/L	1.70U pg/L
	PCB-31	2.05 pg/L	2.05U pg/L
	PCB-52	4.49 pg/L	4.49U pg/L
	PCB-64	1.07 pg/L	1.07U pg/L
	PCB-66	1.92 pg/L	1.92U pg/L
	PCB-90/101/113	6.80 pg/L	6.80U pg/L
	PCB-93/95/98/100/102	5.09 pg/L	5.09U pg/L
	Total Monochlorobiphenyls	14.5 pg/L	14.5U pg/L
	Total Trichlorobiphenyls	18.5 pg/L	18.5U pg/L
L54686-2	PCB-1	2.87 pg/L	2.87U pg/L
	PCB-2	3.14 pg/L	3.14U pg/L
	PCB-3	9.53 pg/L	9.53U pg/L
	PCB-7	3.34 pg/L	3.34U pg/L
	PCB-15	7.48 pg/L	7.48U pg/L
	PCB-52	7.44 pg/L	7.44U pg/L
	PCB-64	1.84 pg/L	1.84U pg/L
	PCB-90/101/113	8.40 pg/L	8.40U pg/L
	PCB-93/95/98/100/102	5.28 pg/L	5.28U pg/L
	PCB-118	4.90 pg/L	4.90U pg/L
	PCB-187	2.83 pg/L	2.83U pg/L
	Total Monochlorobiphenyls	15.5 pg/L	15.5U pg/L
	Total Dichlorobiphenyls	23.4 pg/L	23.4U pg/L
L54686-3	PCB-1	2.43 pg/L	2.43U pg/L
	PCB-2	3.16 pg/L	3.16U pg/L
	PCB-3	8.72 pg/L	8.72U pg/L
	PCB-15	4.99 pg/L	4.99U pg/L
	PCB-20/28	4.88 pg/L	4.88U pg/L
	PCB-31	2.45 pg/L	2.45U pg/L
	PCB-52	5.57 pg/L	5.57U pg/L
	Total Monochlorobiphenyls	14.3 pg/L	14.3U pg/L
	Total Dichlorobiphenyls	14.5 pg/L	14.5U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L54686-4	PCB-1	2.45 pg/L	2.45U pg/L
	PCB-2	2.52 pg/L	2.52U pg/L
	PCB-3	8.54 pg/L	8.54U pg/L
	PCB-15	5.00 pg/L	5.00U pg/L
	PCB-20/28	5.82 pg/L	5.82U pg/L
	PCB-31	1.50 pg/L	1.50U pg/L
	PCB-66	3.32 pg/L	3.32U pg/L
	PCB-118	2.28 pg/L	2.28U pg/L
	PCB-129/138/160/163	2.69 pg/L	2.69U pg/L
	Total Monochlorobiphenyls	13.5 pg/L	13.5U pg/L
	Total Dichlorobiphenyls	13.1 pg/L	13.1U pg/L
	Total Pentachlorobiphenyls	12.3 pg/L	12.3U pg/L
	Total Hexachlorobiphenyls	4.32 pg/L	4.32U pg/L
	Total Heptachlorobiphenyls	0.983 pg/L	0.983U pg/L
L54686-4DUP	PCB-1	2.61 pg/L	2.61U pg/L
	PCB-2	2.53 pg/L	2.53U pg/L
	PCB-3	7.20 pg/L	7.20U pg/L
	PCB-20/28	6.04 pg/L	6.04U pg/L
	PCB-31	1.94 pg/L	1.94U pg/L
	PCB-52	2.29 pg/L	2.29U pg/L
	PCB-66	3.71 pg/L	3.71U pg/L
	PCB-90/101/113	4.57 pg/L	4.57U pg/L
	PCB-118	2.86 pg/L	2.86U pg/L
	Total Monochlorobiphenyls	12.3 pg/L	12.3U pg/L
	Total Dichlorobiphenyls	7.85 pg/L	7.85U pg/L
	Total Pentachlorobiphenyls	14.8 pg/L	14.8U pg/L
	Total Hexachlorobiphenyls	1.18 pg/L	1.18U pg/L
L54686-5	PCB-1	2.26 pg/L	2.26U pg/L
	PCB-2	3.33 pg/L	3.33U pg/L
	PCB-3	7.86 pg/L	7.86U pg/L
	PCB-7	4.95 pg/L	4.95U pg/L
	PCB-15	7.30 pg/L	7.30U pg/L
	Total Monochlorobiphenyls	13.5 pg/L	13.5U pg/L
	Total Dichlorobiphenyls	30.4 pg/L	30.4U pg/L
L54686-6	PCB-1	1.77 pg/L	1.77U pg/L
	PCB-2	1.84 pg/L	1.84U pg/L
	PCB-3	5.46 pg/L	5.46U pg/L
	PCB-15	4.12 pg/L	4.12U pg/L
	PCB-20/28	6.54 pg/L	6.54U pg/L
	PCB-31	3.23 pg/L	3.23U pg/L
	PCB-52	8.85 pg/L	8.85U pg/L
	PCB-64	2.10 pg/L	2.10U pg/L
	Total Monochlorobiphenyls	9.07 pg/L	9.07U pg/L
	Total Dichlorobiphenyls	15.5 pg/L	15.5U pg/L
L55077-1	PCB-1	2.47 pg/L	2.47U pg/L
	PCB-2	2.75 pg/L	2.75U pg/L
	PCB-3	7.70 pg/L	7.70U pg/L
	PCB-15	4.50 pg/L	4.50U pg/L
	PCB-20/28	5.21 pg/L	5.21U pg/L
	PCB-31	1.72 pg/L	1.72U pg/L
	PCB-52	3.57 pg/L	3.57U pg/L
	PCB-66	2.88 pg/L	2.88U pg/L
	PCB-90/101/113	6.40 pg/L	6.40U pg/L
	PCB-93/95/98/100/102	4.97 pg/L	4.97U pg/L
	PCB-187	2.16 pg/L	2.16U pg/L
	Total Monochlorobiphenyls	12.9 pg/L	12.9U pg/L
	Total Dichlorobiphenyls	12.3 pg/L	12.3U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55077-2	PCB-1	2.00 pg/L	2.00U pg/L
	PCB-2	2.48 pg/L	2.48U pg/L
	PCB-3	7.12 pg/L	7.12U pg/L
	PCB-15	6.40 pg/L	6.40U pg/L
	PCB-21	3.65 pg/L	3.65U pg/L
	PCB-31	6.05 pg/L	6.05U pg/L
	PCB-52	7.66 pg/L	7.66U pg/L
	PCB-66	3.90 pg/L	3.90U pg/L
	PCB-90/101/113	8.06 pg/L	8.06U pg/L
	PCB-93/95/98/100/102	5.59 pg/L	5.59U pg/L
	PCB-187	2.70 pg/L	2.70U pg/L
	Total Monochlorobiphenyls	11.6 pg/L	11.6U pg/L
	Total Dichlorobiphenyls	15.1 pg/L	15.1U pg/L
L55077-4	PCB-1	2.20 pg/L	2.20U pg/L
	PCB-2	2.52 pg/L	2.52U pg/L
	PCB-3	8.18 pg/L	8.18U pg/L
	PCB-15	5.70 pg/L	5.70U pg/L
	PCB-20/28	2.55 pg/L	2.55U pg/L
	PCB-21	2.83 pg/L	2.83U pg/L
	PCB-31	1.51 pg/L	1.51U pg/L
	PCB-52	2.62 pg/L	2.62U pg/L
	PCB-64	0.890 pg/L	0.890U pg/L
	PCB-66	1.38 pg/L	1.38U pg/L
	PCB-90/101/113	3.28 pg/L	3.28U pg/L
	PCB-93/95/98/100/102	2.97 pg/L	2.97U pg/L
	PCB-118	2.08 pg/L	2.08U pg/L
	PCB-129/138/160/163	2.41 pg/L	2.41U pg/L
	Total Monochlorobiphenyls	12.9 pg/L	12.9U pg/L
	Total Dichlorobiphenyls	12.7 pg/L	12.7U pg/L
	Total Trichlorobiphenyls	8.13 pg/L	8.13U pg/L
	Total Pentachlorobiphenyls	11.3 pg/L	11.3U pg/L
	Total Heptachlorobiphenyls	2.06 pg/L	2.06U pg/L
L55077-6	PCB-1	2.31 pg/L	2.31U pg/L
	PCB-2	2.48 pg/L	2.48U pg/L
	PCB-3	7.41 pg/L	7.41U pg/L
	PCB-7	7.47 pg/L	7.47U pg/L
	PCB-15	4.67 pg/L	4.67U pg/L
	PCB-20/28	4.95 pg/L	4.95U pg/L
	PCB-21	3.73 pg/L	3.73U pg/L
	PCB-31	2.20 pg/L	2.20U pg/L
	PCB-52	4.08 pg/L	4.08U pg/L
	PCB-66	2.24 pg/L	2.24U pg/L
	PCB-90/101/113	6.78 pg/L	6.78U pg/L
	PCB-93/95/98/100/102	5.68 pg/L	5.68U pg/L
	PCB-118	5.39 pg/L	5.39U pg/L
	Total Monochlorobiphenyls	12.2 pg/L	12.2U pg/L
	Total Dichlorobiphenyls	21.8 pg/L	21.8U pg/L
L55177-1	PCB-1	2.12 pg/L	2.12U pg/L
	PCB-2	2.42 pg/L	2.42U pg/L
	PCB-3	6.53 pg/L	6.53U pg/L
	PCB-15	3.97 pg/L	3.97U pg/L
	PCB-20/28	3.33 pg/L	3.33U pg/L
	PCB-31	1.70 pg/L	1.70U pg/L
	PCB-66	2.58 pg/L	2.58U pg/L
	PCB-90/101/113	6.07 pg/L	6.07U pg/L
	PCB-93/95/98/100/102	5.10 pg/L	5.10U pg/L
	PCB-118	4.51 pg/L	4.51U pg/L
	PCB-187	1.93 pg/L	1.93U pg/L
	Total Monochlorobiphenyls	11.1 pg/L	11.1U pg/L
	Total Dichlorobiphenyls	12.5 pg/L	12.5U pg/L
	Total Trichlorobiphenyls	18.6 pg/L	18.6U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55177-2	PCB-1	2.35 pg/L	2.35U pg/L
	PCB-2	2.51 pg/L	2.51U pg/L
	PCB-3	8.00 pg/L	8.00U pg/L
	PCB-7	3.66 pg/L	3.66U pg/L
	PCB-15	6.34 pg/L	6.34U pg/L
	PCB-52	5.90 pg/L	5.90U pg/L
	PCB-64	2.07 pg/L	2.07U pg/L
	PCB-90/101/113	5.33 pg/L	5.33U pg/L
	PCB-93/95/98/100/102	4.77 pg/L	4.77U pg/L
	PCB-118	4.07 pg/L	4.07U pg/L
	PCB-187	1.97 pg/L	1.97U pg/L
	Total Monochlorobiphenyls	12.9 pg/L	12.9U pg/L
	Total Dichlorobiphenyls	19.4 pg/L	19.4U pg/L
L55177-4	PCB-1	2.59 pg/L	2.59U pg/L
	PCB-2	2.64 pg/L	2.64U pg/L
	PCB-3	9.33 pg/L	9.33U pg/L
	PCB-7	2.99 pg/L	2.99U pg/L
	PCB-15	6.46 pg/L	6.46U pg/L
	PCB-20/28	8.19 pg/L	8.19U pg/L
	PCB-31	5.06 pg/L	5.06U pg/L
	PCB-52	8.19 pg/L	8.19U pg/L
	PCB-64	1.51 pg/L	1.51U pg/L
	PCB-187	0.891 pg/L	0.891U pg/L
	Total Monochlorobiphenyls	14.6 pg/L	14.6U pg/L
	Total Dichlorobiphenyls	17.6 pg/L	17.6U pg/L
L55177-5	PCB-1	2.77 pg/L	2.77U pg/L
	PCB-2	3.69 pg/L	3.69U pg/L
	PCB-3	8.38 pg/L	8.38U pg/L
	PCB-15	7.15 pg/L	7.15U pg/L
	Total Monochlorobiphenyls	14.8 pg/L	14.8U pg/L
	Total Dichlorobiphenyls	38.9 pg/L	38.9U pg/L
L55177-6	PCB-1	2.21 pg/L	2.21U pg/L
	PCB-3	7.21 pg/L	7.21U pg/L
	PCB-20/28	5.56 pg/L	5.56U pg/L
	PCB-31	3.15 pg/L	3.15U pg/L
	PCB-52	6.20 pg/L	6.20U pg/L
	PCB-64	1.47 pg/L	1.47U pg/L
	PCB-66	3.67 pg/L	3.67U pg/L
	Total Monochlorobiphenyls	9.42 pg/L	9.42U pg/L
	Total Dichlorobiphenyls	10.4 pg/L	10.4U pg/L

Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries (%R) were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG DPWG39655	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG DPWG39655

SDG	Sample	Compound	Flag	A or P	Reason
DPWG39655	L54681-1 L54681-2 L54681-3 L54681-4 L54686-1 L54686-2 L54686-3 L54686-4 L54686-5 L54686-6 L55077-1 L55077-2 L55077-4 L55077-6 L55177-1 L55177-2 L55177-4 L55177-5 L55177-6 L54686-4DUP	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A	Compound quantitation and RLs (EMPC)

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG DPWG39655

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG39655	L54681-1	PCB-1 PCB-2 PCB-3 PCB-20/28 PCB-21 PCB-31 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.35U pg/L 3.00U pg/L 8.03U pg/L 4.59U pg/L 1.89U pg/L 2.41U pg/L 13.4U pg/L 10.1U pg/L	A
DPWG39655	L54681-2	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-129/138/160/163 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.33U pg/L 2.72U pg/L 8.26U pg/L 5.71U pg/L 6.93U pg/L 1.56U pg/L 3.22U pg/L 5.86U pg/L 2.76U pg/L 5.03U pg/L 5.29U pg/L 4.51U pg/L 5.21U pg/L 1.84U pg/L 13.3U pg/L 14.3U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG39655	L54681-3	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-64 PCB-66 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.77U pg/L 3.38U pg/L 9.46U pg/L 5.42U pg/L 4.90U pg/L 1.86U pg/L 2.07U pg/L 6.81U pg/L 1.42U pg/L 2.77U pg/L 15.6U pg/L 11.8U pg/L	A
DPWG39655	L54681-4	PCB-1 PCB-2 PCB-3 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-64 PCB-66 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls	2.30U pg/L 2.44U pg/L 7.90U pg/L 3.45U pg/L 1.08U pg/L 2.32U pg/L 7.67U pg/L 1.77U pg/L 2.90U pg/L 12.6U pg/L 6.99U pg/L 8.65U pg/L	A
DPWG39655	L54686-1	PCB-1 PCB-2 PCB-3 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-64 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 Total Monochlorobiphenyls Total Trichlorobiphenyls	2.62U pg/L 2.96U pg/L 8.93U pg/L 4.90U pg/L 1.70U pg/L 2.05U pg/L 4.49U pg/L 1.07U pg/L 1.92U pg/L 6.80U pg/L 5.09U pg/L 14.5U pg/L 18.5U pg/L	A
DPWG39655	L54686-2	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 PCB-52 PCB-64 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.87U pg/L 3.14U pg/L 9.53U pg/L 3.34U pg/L 7.48U pg/L 7.44U pg/L 1.84U pg/L 8.40U pg/L 5.28U pg/L 4.90U pg/L 2.83U pg/L 15.5U pg/L 23.4U pg/L	A
DPWG39655	L54686-3	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-31 PCB-52 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.43U pg/L 3.16U pg/L 8.72U pg/L 4.99U pg/L 4.88U pg/L 2.45U pg/L 5.57U pg/L 14.3U pg/L 14.5U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG39655	L54686-4	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-31 PCB-66 PCB-118 PCB-129/138/160/163 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls Total Heptachlorobiphenyls	2.45U pg/L 2.52U pg/L 8.54U pg/L 5.00U pg/L 5.82U pg/L 1.50U pg/L 3.32U pg/L 2.28U pg/L 2.69U pg/L 13.5U pg/L 13.1U pg/L 12.3U pg/L 4.32U pg/L 0.983U pg/L	A
DPWG39655	L54686-4DUP	PCB-1 PCB-2 PCB-3 PCB-20/28 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-118 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls	2.61U pg/L 2.53U pg/L 7.20U pg/L 6.04U pg/L 1.94U pg/L 2.29U pg/L 3.71U pg/L 4.57U pg/L 2.86U pg/L 12.3U pg/L 7.85U pg/L 14.8U pg/L 1.18U pg/L	A
DPWG39655	L54686-5	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.26U pg/L 3.33U pg/L 7.86U pg/L 4.95U pg/L 7.30U pg/L 13.5U pg/L 30.4U pg/L	A
DPWG39655	L54686-6	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-31 PCB-52 PCB-64 Total Monochlorobiphenyls Total Dichlorobiphenyls	1.77U pg/L 1.84U pg/L 5.46U pg/L 4.12U pg/L 6.54U pg/L 3.23U pg/L 8.85U pg/L 2.10U pg/L 9.07U pg/L 15.5U pg/L	A
DPWG39655	L55077-1	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.47U pg/L 2.75U pg/L 7.70U pg/L 4.50U pg/L 5.21U pg/L 1.72U pg/L 3.57U pg/L 2.88U pg/L 6.40U pg/L 4.97U pg/L 2.16U pg/L 12.9U pg/L 12.3U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG39655	L55077-2	PCB-1 PCB-2 PCB-3 PCB-15 PCB-21 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.00U pg/L 2.48U pg/L 7.12U pg/L 6.40U pg/L 3.65U pg/L 6.05U pg/L 7.66U pg/L 3.90U pg/L 8.06U pg/L 5.59U pg/L 2.70U pg/L 11.6U pg/L 15.1U pg/L	A
DPWG39655	L55077-4	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-64 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-129/138/160/163 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls Total Heptachlorobiphenyls	2.20U pg/L 2.52U pg/L 8.18U pg/L 5.70U pg/L 2.55U pg/L 2.83U pg/L 1.51U pg/L 2.62U pg/L 0.890U pg/L 1.38U pg/L 3.28U pg/L 2.97U pg/L 2.08U pg/L 2.41U pg/L 12.9U pg/L 12.7U pg/L 8.13U pg/L 11.3U pg/L 2.06U pg/L	A
DPWG39655	L55077-6	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 PCB-20/28 PCB-21 PCB-31 PCB-52 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.31U pg/L 2.48U pg/L 7.41U pg/L 7.47U pg/L 4.67U pg/L 4.95U pg/L 3.73U pg/L 2.20U pg/L 4.08U pg/L 2.24U pg/L 6.78U pg/L 5.68U pg/L 5.39U pg/L 12.2U pg/L 21.8U pg/L	A
DPWG39655	L55177-1	PCB-1 PCB-2 PCB-3 PCB-15 PCB-20/28 PCB-31 PCB-66 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls	2.12U pg/L 2.42U pg/L 6.53U pg/L 3.97U pg/L 3.33U pg/L 1.70U pg/L 2.58U pg/L 6.07U pg/L 5.10U pg/L 4.51U pg/L 1.93U pg/L 11.1U pg/L 12.5U pg/L 18.6U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG39655	L55177-2	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 PCB-52 PCB-64 PCB-90/101/113 PCB-93/95/98/100/102 PCB-118 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.35U pg/L 2.51U pg/L 8.00U pg/L 3.66U pg/L 6.34U pg/L 5.90U pg/L 2.07U pg/L 5.33U pg/L 4.77U pg/L 4.07U pg/L 1.97U pg/L 12.9U pg/L 19.4U pg/L	A
DPWG39655	L55177-4	PCB-1 PCB-2 PCB-3 PCB-7 PCB-15 PCB-20/28 PCB-31 PCB-52 PCB-64 PCB-187 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.59U pg/L 2.64U pg/L 9.33U pg/L 2.99U pg/L 6.46U pg/L 8.19U pg/L 5.06U pg/L 8.19U pg/L 1.51U pg/L 0.891U pg/L 14.6U pg/L 17.6U pg/L	A
DPWG39655	L55177-5	PCB-1 PCB-2 PCB-3 PCB-15 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.77U pg/L 3.69U pg/L 8.38U pg/L 7.15U pg/L 14.8U pg/L 38.9U pg/L	A
DPWG39655	L55177-6	PCB-1 PCB-3 PCB-20/28 PCB-31 PCB-52 PCB-64 PCB-66 Total Monochlorobiphenyls Total Dichlorobiphenyls	2.21U pg/L 7.21U pg/L 5.56U pg/L 3.15U pg/L 6.20U pg/L 1.47U pg/L 3.67U pg/L 9.42U pg/L 10.4U pg/L	A

LDC #: 28363H31 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/19/12

SDG #: DPWG39655 Level III Page: 1 of 1

Laboratory: ~~Analytical Perspectives~~ AXYS Reviewer: Q

2nd Reviewer: L

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 11/16/11 - 3/5/12
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	≤20%
IV.	Routine calibration/ICV	A	30/≤50%
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates /DUP	N/A	CS
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitationRL/~~LOQ/LODs~~	SW	
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
all H2O's

1	L54681-1	11	L55077-1	21	WG39377-101	31	
2	L54681-2	12	L55077-2	22		32	
3	L54681-3	13	L55077-4	23		33	
4	L54681-4	14	L55077-6	24		34	
5	L54686-1	15	L55177-1	25		35	
6	L54686-2	16	L55177-2	26		36	
7	L54686-3	17	L55177-4	27		37	
8	L54686-4	18	L55177-5	28		38	
9	L54686-5	19	L55177-6	29		39	
10	L54686-6	20	L54686-4DUP	30		40	

LDC #: 28363H31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: a
2nd Reviewer: L

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)

Blank extraction date: 3/12/12 **Blank analysis date:** 3/15/12
Conc. units: pg/L **Associated samples:** All Qual U

Compound	Blank ID	Sample Identification											
	WG39377-101	5X	1	2	3	4	5	6	7	8	20	9	10
PCB 1	2.00	10	2.35	2.33	2.77	2.30	2.62	2.87	2.43	2.45	2.61	2.26	1.77
PCB 2	2.27	11.35	3.00	2.72	3.38	2.44	2.96	3.14	3.16	2.52	2.53	3.33	1.84
PCB 3	6.94	34.7	8.03	8.26	9.46	7.90	8.93	9.53	8.72	8.54	7.20	7.86	5.46
PCB 7	5.60	28						3.34				4.95	
PCB 15	4.14	20.7		5.71	5.42			7.48	4.99	5.00		7.30	4.12
PCB 20/28	1.71	8.55	4.59	6.93	4.90	3.45	4.90		4.88	5.82	6.04		6.54
PCB 21	0.844	4.22	1.89	1.56	1.86	1.08	1.70						
PCB 31	1.28	6.4	2.41	3.22	2.07	2.32	2.05		2.45	1.50	1.94		3.23
PCB 44/47/65	2.41	12.05											
PCB 52	2.08	10.4		5.86	6.81	7.67	4.49	7.44	5.57		2.29		8.85
PCB 64	0.602	3.01			1.42	1.77	1.07	1.84					2.10
PCB 66	0.790	3.95		2.76	2.77	2.90	1.92			3.32	3.71		
PCB 90/101/113	1.82	9.1		5.03			6.80	8.40			4.57		
PCB 93/95/98/100/102	1.43	7.15		5.29			5.09	5.28					
PCB 118	1.39	6.95		4.51				4.90		2.28	2.86		
PCB 129/138/160/163	1.31	6.55		5.21						2.69			
PCB 187	0.567	2.835		1.84				2.83					
Total Monochlorobiphenyls	11.2	56	13.4	13.3	15.6	12.6	14.5	15.5	14.3	13.5	12.3	13.5	9.07
Total Dichlorobiphenyls	9.74	48.7	10.1	14.3	11.8	6.99		23.4	14.5	13.1	7.85	30.4	15.5
Total Trichlorobiphenyls	3.83	19.15				8.65	18.5						
Total Tetrachlorobiphenyls	5.88	29.4											
Total Pentachlorobiphenyls	4.64	23.2								12.3	14.8		
Total Hexachlorobiphenyls	1.31	6.55								4.32	1.18		

Compound	Blank ID	Sample Identification											
	WG39377-101	5X	1	2	3	4	5	6	7	8	20	9	10
Total Heptachlorobiphenyls	0.567	2.835								0.983			
Total PCBs	37.2	186											

*Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentr/ation were qualified as not detected, "U".

LDC #: 28363H31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)

Blank extraction date: 3/12/12 **Blank analysis date:** 3/15/12
Conc. units: pg/L **Associated samples:** All Qual U

Compound	Blank ID	Sample Identification											
	WG39377-101	5X	11	12	13	14	15	16	17	18	19		
PCB 1	2.00	10	2.47	2.00	2.20	2.31	2.12	2.35	2.59	2.77	2.21		
PCB 2	2.27	11.35	2.75	2.48	2.52	2.48	2.42	2.51	2.64	3.69			
PCB 3	6.94	34.7	7.70	7.12	8.18	7.41	6.53	8.00	9.33	8.38	7.21		
PCB 7	5.60	28				7.47		3.66	2.99				
PCB 15	4.14	20.7	4.50	6.40	5.70	4.67	3.97	6.34	6.46	7.15			
PCB 20/28	1.71	8.55	5.21		2.55	4.95	3.33		8.19		5.56		
PCB 21	0.844	4.22		3.65	2.83	3.73							
PCB 31	1.28	6.4	1.72	6.05	1.51	2.20	1.70		5.06		3.15		
PCB 44/47/65	2.41	12.05											
PCB 52	2.08	10.4	3.57	7.66	2.62	4.08		5.90	8.19		6.20		
PCB 64	0.602	3.01			0.890			2.07	1.51		1.47		
PCB 66	0.790	3.95	2.88	3.90	1.38	2.24	2.58				3.67		
PCB 90/101/113	1.82	9.1	6.40	8.06	3.28	6.78	6.07	5.33					
PCB 93/95/98/100/102	1.43	7.15	4.97	5.59	2.97	5.68	5.10	4.77					
PCB 118	1.39	6.95			2.08	5.39	4.51	4.07					
PCB 129/138/160/163	1.31	6.55			2.41								
PCB 187	0.567	2.835	2.16	2.70			1.93	1.97	0.891				
Total Monochlorobiphenyls	11.2	56	12.9	11.6	12.9	12.2	11.1	12.9	14.6	14.8	9.42		
Total Dichlorobiphenyls	9.74	48.7	12.3	15.1	12.7	21.8	12.5	19.4	17.6	38.9	10.4		
Total Trichlorobiphenyls	3.83	19.15			8.13		18.6						
Total Tetrachlorobiphenyls	5.88	29.4											
Total Pentachlorobiphenyls	4.64	23.2			11.3								
Total Hexachlorobiphenyls	1.31	6.55											

Compound	Blank ID	Sample Identification											
	WG39377-101	5X	11	12	13	14	15	16	17	18	19		
Total Heptachlorobiphenyls	0.567	2.835			2.06								
Total PCBs	37.2	186											

*Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentr/ation were qualified as not detected, "U".

LDC #: 28363H31

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and RLs

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		all	K flag - EMPC results		U / A

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Lower Duwamish Waterway
Collection Date:	March 10 through March 29, 2012
LDC Report Date:	September 25, 2012
Matrix:	Water
Parameters:	Polychlorinated Biphenyls as Congeners
Validation Level:	EPA Level III
Laboratory:	AXYS Analytical Services, Ltd.
Sample Delivery Group (SDG):	DPWG40324

Sample Identification

L55284-1
L55284-2
L55284-3
L55284-4
L55284-5
L55284-6
L55283-1
L55283-2
L55283-3
L55283-4
L55283-6
L55384-1
L55384-2
L55384-3
L55384-4
L55284-3DUP

Introduction

This data review covers 16 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1668A for Polychlorinated Biphenyls as Congeners.

This review follows the Green River Loading Study Sampling and Analysis Plan (Final October 2011) and EPA Region 10 SOP for the Validation of Polychlorinated Dibenzodioxin (PCDD) and Polychlorinated Dibenzofuran (PCDF) Data (Revision 2.0, January 31, 1996).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

- J1 Blank Contamination: Indicates possible high bias and/or false positives.
- J2 Calibration Range exceeded: Indicates possible low bias.
- J3 Holding times not met: Indicates low bias for most analytes.
- J4 Other QC parameters outside control limits: bias not readily determined.
- J5 Other QC parameters outside control limits. The reported results appear to be biased high. The actual value of target compound in the sample may be lower than the value reported by the laboratory.
- J6 Other QC parameters outside control limits. The reported results appear to be biased low. The actual value of target compound in the sample may be higher than the value reported by the laboratory.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all congeners. The chromatographic resolution between the congeners PCB-23 and PCB-34 and congeners PCB-182 and PCB-187 was resolved with a valley of less than or equal to 40%.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

The ion abundance ratios for all PCBs were within method criteria.

IV. Routine Calibration

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 30.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The ion abundance ratios for all PCBs were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyls as congeners contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
WG40069-101	5/24/12	PCB 1	1.16 pg/L	All samples in SDG DPWG40324
		PCB 2	1.22 pg/L	
		PCB 3	2.32 pg/L	
		PCB 8	1.38 pg/L	
		PCB 11	9.80 pg/L	
		PCB 15	1.24 pg/L	
		PCB 20/28	1.54 pg/L	
		PCB 22	0.650 pg/L	
		PCB 31	1.14 pg/L	
		PCB 40	0.807 pg/L	
		PCB 56	1.02 pg/L	
		PCB 61/70/74/76	6.30 pg/L	
		PCB 64	0.941 pg/L	
		PCB 66	2.12 pg/L	
		PCB 83/99	3.54 pg/L	
		PCB 84	2.28 pg/L	
		PCB 85/116/117	1.67 pg/L	
		PCB 86/87/97/108/119/125	6.01 pg/L	
		PCB 88/91	0.766 pg/L	
		PCB 90/101/113	7.65 pg/L	
		PCB 92	1.40 pg/L	
		PCB 93/95/98/100/102	5.09 pg/L	
		PCB 105	2.61 pg/L	
		PCB 110/115	7.87 pg/L	
		PCB 118	5.73 pg/L	
		PCB 128/166	0.697 pg/L	
		PCB 129/138/160/163	4.13 pg/L	
		PCB 132	1.35 pg/L	
		PCB 135/151/154	1.40 pg/L	
		PCB 153/168	3.27 pg/L	
		PCB 187	1.19 pg/L	
		Total Monochlorobiphenyls	4.70 pg/L	
		Total Dichlorobiphenyls	12.4 pg/L	
		Total Trichlorobiphenyls	3.33 pg/L	
		Total Tetrachlorobiphenyls	11.2 pg/L	
		Total Pentachlorobiphenyls	44.6 pg/L	
		Total Hexachlorobiphenyls	10.8 pg/L	
		Total Heptachlorobiphenyls	1.19 pg/L	
		Total PCBs	88.3 pg/L	

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
L55284-1	PCB 1	1.70 pg/L	1.70U pg/L
	PCB 2	1.78 pg/L	1.78U pg/L
	PCB 3	3.20 pg/L	3.20U pg/L
	PCB 8	2.56 pg/L	2.56U pg/L
	PCB 11	14.0 pg/L	14.0U pg/L
	PCB 20/28	4.21 pg/L	4.21U pg/L
	PCB 31	2.69 pg/L	2.69U pg/L
	PCB 40	1.87 pg/L	1.87U pg/L
	PCB 56	1.55 pg/L	1.55U pg/L
	PCB 61/70/74/76	11.1 pg/L	11.1U pg/L
	PCB 64	1.96 pg/L	1.96U pg/L
	PCB 66	4.29 pg/L	4.29U pg/L
	PCB 83/99	10.6 pg/L	10.6U pg/L
	PCB 84	3.87 pg/L	3.87U pg/L
	PCB 85/116/117	3.50 pg/L	3.50U pg/L
	PCB 86/87/97/108/119/125	11.7 pg/L	11.7U pg/L
	PCB 88/91	1.71 pg/L	1.71U pg/L
	PCB 90/101/113	18.2 pg/L	18.2U pg/L
	PCB 93/95/98/100/102	12.0 pg/L	12.0U pg/L
	PCB 105	5.67 pg/L	5.67U pg/L
	PCB 110/115	18.6 pg/L	18.6U pg/L
	PCB 118	15.1 pg/L	15.1U pg/L
	PCB 128/166	2.66 pg/L	2.66U pg/L
	PCB 129/138/160/163	12.7 pg/L	12.7U pg/L
	PCB 132	4.13 pg/L	4.13U pg/L
	PCB 153/168	10.5 pg/L	10.5U pg/L
	Total Monochlorobiphenyls	6.68 pg/L	6.68U pg/L
	Total Dichlorobiphenyls	16.6 pg/L	16.6U pg/L
	Total Trichlorobiphenyls	15.5 pg/L	15.5U pg/L
	Total Pentachlorobiphenyls	103 pg/L	103U pg/L
	Total Hexachlorobiphenyls	45.0 pg/L	45.0U pg/L
	Total Heptachlorobiphenyls	1.61 pg/L	1.61U pg/L
L55284-2	PCB 1	2.10 pg/L	2.10U pg/L
	PCB 2	2.17 pg/L	2.17U pg/L
	PCB 8	1.83 pg/L	1.83U pg/L
	PCB 11	11.2 pg/L	11.2U pg/L
	PCB 15	3.11 pg/L	3.11U pg/L
	PCB 20/28	6.86 pg/L	6.86U pg/L
	PCB 22	2.28 pg/L	2.28U pg/L
	PCB 31	4.34 pg/L	4.34U pg/L
	PCB 40	2.58 pg/L	2.58U pg/L
	PCB 56	2.03 pg/L	2.03U pg/L
	PCB 61/70/74/76	9.90 pg/L	9.90U pg/L
	PCB 64	2.99 pg/L	2.99U pg/L
	PCB 66	4.85 pg/L	4.85U pg/L
	PCB 85/116/117	2.48 pg/L	2.48U pg/L
	PCB 88/91	1.46 pg/L	1.46U pg/L
	PCB 90/101/113	11.1 pg/L	11.1U pg/L
	PCB 93/95/98/100/102	7.50 pg/L	7.50U pg/L
	PCB 105	3.24 pg/L	3.24U pg/L
	PCB 110/115	10.0 pg/L	10.0U pg/L
	PCB 118	6.92 pg/L	6.92U pg/L
	PCB 128/166	1.62 pg/L	1.62U pg/L
	PCB 129/138/160/163	7.46 pg/L	7.46U pg/L
	PCB 132	2.67 pg/L	2.67U pg/L
	PCB 153/168	7.09 pg/L	7.09U pg/L
	PCB 187	2.36 pg/L	2.36U pg/L
	Total Monochlorobiphenyls	4.27 pg/L	4.27U pg/L
	Total Dichlorobiphenyls	17.3 pg/L	17.3U pg/L
	Total Pentachlorobiphenyls	42.7 pg/L	42.7U pg/L
	Total Hexachlorobiphenyls	24.6 pg/L	24.6U pg/L
	Total Heptachlorobiphenyls	5.49 pg/L	5.49U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55284-3	PCB 1	1.02 pg/L	1.02U pg/L
	PCB 2	1.16 pg/L	1.16U pg/L
	PCB 3	2.89 pg/L	2.89U pg/L
	PCB 8	1.97 pg/L	1.97U pg/L
	PCB 11	13.1 pg/L	13.1U pg/L
	PCB 15	1.44 pg/L	1.44U pg/L
	PCB 20/28	3.15 pg/L	3.15U pg/L
	PCB 22	1.01 pg/L	1.01U pg/L
	PCB 31	2.28 pg/L	2.28U pg/L
	PCB 40	2.39 pg/L	2.39U pg/L
	PCB 61/70/74/76	9.95 pg/L	9.95U pg/L
	PCB 64	1.89 pg/L	1.89U pg/L
	PCB 66	4.58 pg/L	4.58U pg/L
	PCB 83/99	10.3 pg/L	10.3U pg/L
	PCB 84	4.17 pg/L	4.17U pg/L
	PCB 85/116/117	3.22 pg/L	3.22U pg/L
	PCB 86/87/97/108/119/125	11.3 pg/L	11.3U pg/L
	PCB 88/91	2.55 pg/L	2.55U pg/L
	PCB 90/101/113	18.8 pg/L	18.8U pg/L
	PCB 92	2.97 pg/L	2.97U pg/L
	PCB 93/95/98/100/102	13.6 pg/L	13.6U pg/L
	PCB 105	4.89 pg/L	4.89U pg/L
	PCB 110/115	19.0 pg/L	19.0U pg/L
	PCB 118	12.3 pg/L	12.3U pg/L
	PCB 128/166	3.28 pg/L	3.28U pg/L
	PCB 129/138/160/163	18.2 pg/L	18.2U pg/L
	PCB 132	5.41 pg/L	5.41U pg/L
	PCB 135/151/154	5.93 pg/L	5.93U pg/L
	PCB 187	5.57 pg/L	5.57U pg/L
	Total Monochlorobiphenyls	5.07 pg/L	5.07U pg/L
	Total Dichlorobiphenyls	18.2 pg/L	18.2U pg/L
	Total Trichlorobiphenyls	13.3 pg/L	13.3U pg/L
	Total Pentachlorobiphenyls	103 pg/L	103U pg/L
L55284-3DUP	PCB 1	1.28 pg/L	1.28U pg/L
	PCB 8	1.67 pg/L	1.67U pg/L
	PCB 11	13.4 pg/L	13.4U pg/L
	PCB 15	1.40 pg/L	1.40U pg/L
	PCB 20/28	2.98 pg/L	2.98U pg/L
	PCB 22	0.960 pg/L	0.960U pg/L
	PCB 40	1.91 pg/L	1.91U pg/L
	PCB 56	1.88 pg/L	1.88U pg/L
	PCB 61/70/74/76	9.28 pg/L	9.28U pg/L
	PCB 64	1.51 pg/L	1.51U pg/L
	PCB 66	3.95 pg/L	3.95U pg/L
	PCB 83/99	10.8 pg/L	10.8U pg/L
	PCB 84	3.65 pg/L	3.65U pg/L
	PCB 86/87/97/108/119/125	11.1 pg/L	11.1U pg/L
	PCB 90/101/113	17.0 pg/L	17.0U pg/L
	PCB 92	2.89 pg/L	2.89U pg/L
	PCB 93/95/98/100/102	11.1 pg/L	11.1U pg/L
	PCB 105	4.79 pg/L	4.79U pg/L
	PCB 110/115	16.7 pg/L	16.7U pg/L
	PCB 118	11.5 pg/L	11.5U pg/L
	PCB 128/166	3.33 pg/L	3.33U pg/L
	PCB 129/138/160/163	17.0 pg/L	17.0U pg/L
	PCB 132	4.88 pg/L	4.88U pg/L
	PCB 135/151/154	4.55 pg/L	4.55U pg/L
	PCB 153/168	15.4 pg/L	15.4U pg/L
	PCB 187	5.55 pg/L	5.55U pg/L
	Total Monochlorobiphenyls	1.28 pg/L	1.28U pg/L
	Total Dichlorobiphenyls	18.5 pg/L	18.5U pg/L
	Total Trichlorobiphenyls	11.7 pg/L	11.7U pg/L
	Total Pentachlorobiphenyls	90.5 pg/L	90.5U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55284-4	PCB 1	1.45 pg/L	1.45U pg/L
	PCB 2	1.42 pg/L	1.42U pg/L
	PCB 3	2.66 pg/L	2.66U pg/L
	PCB 11	11.3 pg/L	11.3U pg/L
	PCB 15	1.29 pg/L	1.29U pg/L
	PCB 20/28	2.98 pg/L	2.98U pg/L
	PCB 31	1.62 pg/L	1.62U pg/L
	PCB 56	1.72 pg/L	1.72U pg/L
	PCB 61/70/74/76	9.61 pg/L	9.61U pg/L
	PCB 64	1.73 pg/L	1.73U pg/L
	PCB 83/99	8.59 pg/L	8.59U pg/L
	PCB 84	3.82 pg/L	3.82U pg/L
	PCB 86/87/97/108/119/125	11.5 pg/L	11.5U pg/L
	PCB 88/91	1.92 pg/L	1.92U pg/L
	PCB 90/101/113	13.1 pg/L	13.1U pg/L
	PCB 92	2.20 pg/L	2.20U pg/L
	PCB 93/95/98/100/102	10.1 pg/L	10.1U pg/L
	PCB 105	8.21 pg/L	8.21U pg/L
	PCB 110/115	18.3 pg/L	18.3U pg/L
	PCB 118	17.5 pg/L	17.5U pg/L
	PCB 132	5.05 pg/L	5.05U pg/L
	PCB 135/151/154	4.76 pg/L	4.76U pg/L
	Total Monochlorobiphenyls	5.53 pg/L	5.53U pg/L
	Total Dichlorobiphenyls	12.6 pg/L	12.6U pg/L
	Total Trichlorobiphenyls	10.9 pg/L	10.9U pg/L
	Total Pentachlorobiphenyls	99.6 pg/L	99.6U pg/L
L55284-5	PCB 1	1.51 pg/L	1.51U pg/L
	PCB 2	1.78 pg/L	1.78U pg/L
	PCB 3	3.06 pg/L	3.06U pg/L
	PCB 8	1.57 pg/L	1.57U pg/L
	PCB 11	12.3 pg/L	12.3U pg/L
	PCB 15	2.77 pg/L	2.77U pg/L
	PCB 20/28	4.16 pg/L	4.16U pg/L
	PCB 22	0.678 pg/L	0.678U pg/L
	PCB 31	2.04 pg/L	2.04U pg/L
	PCB 56	2.39 pg/L	2.39U pg/L
	PCB 61/70/74/76	13.0 pg/L	13.0U pg/L
	PCB 64	4.41 pg/L	4.41U pg/L
	PCB 66	6.05 pg/L	6.05U pg/L
	PCB 83/99	15.4 pg/L	15.4U pg/L
	PCB 84	8.60 pg/L	8.60U pg/L
	PCB 85/116/117	5.33 pg/L	5.33U pg/L
	PCB 86/87/97/108/119/125	20.9 pg/L	20.9U pg/L
	PCB 88/91	3.66 pg/L	3.66U pg/L
	PCB 90/101/113	28.9 pg/L	28.9U pg/L
	PCB 92	5.15 pg/L	5.15U pg/L
	PCB 105	11.4 pg/L	11.4U pg/L
	PCB 110/115	37.5 pg/L	37.5U pg/L
	PCB 118	24.1 pg/L	24.1U pg/L
	Total Monochlorobiphenyls	6.35 pg/L	6.35U pg/L
	Total Dichlorobiphenyls	18.7 pg/L	18.7U pg/L
	Total Pentachlorobiphenyls	194 pg/L	194U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55284-6	PCB 1	0.645 pg/L	0.645U pg/L
	PCB 2	0.730 pg/L	0.730U pg/L
	PCB 3	2.03 pg/L	2.03U pg/L
	PCB 8	2.35 pg/L	2.35U pg/L
	PCB 11	15.2 pg/L	15.2U pg/L
	PCB 20/28	6.01 pg/L	6.01U pg/L
	PCB 31	3.47 pg/L	3.47U pg/L
	PCB 40	2.62 pg/L	2.62U pg/L
	PCB 56	2.00 pg/L	2.00U pg/L
	PCB 61/70/74/76	13.7 pg/L	13.7U pg/L
	PCB 64	2.79 pg/L	2.79U pg/L
	PCB 66	5.50 pg/L	5.50U pg/L
	PCB 83/99	12.5 pg/L	12.5U pg/L
	PCB 84	4.48 pg/L	4.48U pg/L
	PCB 86/87/97/108/119/125	12.7 pg/L	12.7U pg/L
	PCB 88/91	2.85 pg/L	2.85U pg/L
	PCB 90/101/113	19.4 pg/L	19.4U pg/L
	PCB 92	3.49 pg/L	3.49U pg/L
	PCB 93/95/98/100/102	14.6 pg/L	14.6U pg/L
	PCB 105	6.28 pg/L	6.28U pg/L
	PCB 110/115	20.3 pg/L	20.3U pg/L
	PCB 118	17.4 pg/L	17.4U pg/L
	PCB 129/138/160/163	16.2 pg/L	16.2U pg/L
	PCB 132	5.82 pg/L	5.82U pg/L
	PCB 153/168	12.4 pg/L	12.4U pg/L
	PCB 187	4.42 pg/L	4.42U pg/L
	Total Monochlorobiphenyls	3.41 pg/L	3.41U pg/L
	Total Dichlorobiphenyls	18.9 pg/L	18.9U pg/L
	Total Pentachlorobiphenyls	117 pg/L	117U pg/L
L55283-1	PCB 1	1.69 pg/L	1.69U pg/L
	PCB 2	2.19 pg/L	2.19U pg/L
	PCB 3	3.29 pg/L	3.29U pg/L
	PCB 8	2.33 pg/L	2.33U pg/L
	PCB 11	12.9 pg/L	12.9U pg/L
	PCB 15	1.84 pg/L	1.84U pg/L
	PCB 20/28	4.79 pg/L	4.79U pg/L
	PCB 22	1.20 pg/L	1.20U pg/L
	PCB 31	2.65 pg/L	2.65U pg/L
	PCB 40	1.87 pg/L	1.87U pg/L
	PCB 56	1.52 pg/L	1.52U pg/L
	PCB 61/70/74/76	10.2 pg/L	10.2U pg/L
	PCB 66	4.40 pg/L	4.40U pg/L
	PCB 83/99	9.84 pg/L	9.84U pg/L
	PCB 85/116/117	2.98 pg/L	2.98U pg/L
	PCB 86/87/97/108/119/125	10.7 pg/L	10.7U pg/L
	PCB 88/91	1.92 pg/L	1.92U pg/L
	PCB 90/101/113	15.2 pg/L	15.2U pg/L
	PCB 92	2.48 pg/L	2.48U pg/L
	PCB 93/95/98/100/102	11.8 pg/L	11.8U pg/L
	PCB 105	5.27 pg/L	5.27U pg/L
	PCB 110/115	16.5 pg/L	16.5U pg/L
	PCB 118	14.0 pg/L	14.0U pg/L
	PCB 129/138/160/163	11.2 pg/L	11.2U pg/L
	PCB 135/151/154	4.13 pg/L	4.13U pg/L
	PCB 153/168	9.03 pg/L	9.03U pg/L
	PCB 187	2.40 pg/L	2.40U pg/L
	Total Monochlorobiphenyls	7.17 pg/L	7.17U pg/L
	Total Dichlorobiphenyls	18.6 pg/L	18.6U pg/L
	Total Pentachlorobiphenyls	91.8 pg/L	91.8U pg/L
	Total Hexachlorobiphenyls	39.2 pg/L	39.2U pg/L
	Total Heptachlorobiphenyls	4.67 pg/L	4.67U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55283-2	PCB 1	1.71 pg/L	1.71U pg/L
	PCB 2	1.87 pg/L	1.87U pg/L
	PCB 3	3.11 pg/L	3.11U pg/L
	PCB 8	2.23 pg/L	2.23U pg/L
	PCB 11	11.6 pg/L	11.6U pg/L
	PCB 15	2.87 pg/L	2.87U pg/L
	PCB 31	5.47 pg/L	5.47U pg/L
	PCB 56	2.76 pg/L	2.76U pg/L
	PCB 61/70/74/76	11.2 pg/L	11.2U pg/L
	PCB 64	3.66 pg/L	3.66U pg/L
	PCB 66	4.78 pg/L	4.78U pg/L
	PCB 83/99	5.76 pg/L	5.76U pg/L
	PCB 85/116/117	2.13 pg/L	2.13U pg/L
	PCB 86/87/97/108/119/125	7.42 pg/L	7.42U pg/L
	PCB 90/101/113	9.00 pg/L	9.00U pg/L
	PCB 93/95/98/100/102	8.42 pg/L	8.42U pg/L
	PCB 105	2.81 pg/L	2.81U pg/L
	PCB 110/115	11.4 pg/L	11.4U pg/L
	PCB 118	7.11 pg/L	7.11U pg/L
	PCB 128/166	1.46 pg/L	1.46U pg/L
	PCB 129/138/160/163	6.76 pg/L	6.76U pg/L
	PCB 132	2.21 pg/L	2.21U pg/L
	PCB 135/151/154	2.39 pg/L	2.39U pg/L
	PCB 153/168	5.64 pg/L	5.64U pg/L
	PCB 187	2.04 pg/L	2.04U pg/L
	Total Monochlorobiphenyls	6.69 pg/L	6.69U pg/L
	Total Dichlorobiphenyls	19.5 pg/L	19.5U pg/L
	Total Pentachlorobiphenyls	54.8 pg/L	54.8U pg/L
	Total Hexachlorobiphenyls	26.6 pg/L	26.6U pg/L
	Total Heptachlorobiphenyls	2.04 pg/L	2.04U pg/L
L55283-3	PCB 1	1.55 pg/L	1.55U pg/L
	PCB 2	1.72 pg/L	1.72U pg/L
	PCB 3	2.93 pg/L	2.93U pg/L
	PCB 8	1.77 pg/L	1.77U pg/L
	PCB 11	11.0 pg/L	11.0U pg/L
	PCB 20/28	3.60 pg/L	3.60U pg/L
	PCB 22	1.06 pg/L	1.06U pg/L
	PCB 31	2.06 pg/L	2.06U pg/L
	PCB 40	2.66 pg/L	2.66U pg/L
	PCB 61/70/74/76	11.9 pg/L	11.9U pg/L
	PCB 66	5.11 pg/L	5.11U pg/L
	PCB 83/99	13.6 pg/L	13.6U pg/L
	PCB 84	4.59 pg/L	4.59U pg/L
	PCB 86/87/97/108/119/125	15.3 pg/L	15.3U pg/L
	PCB 93/95/98/100/102	16.9 pg/L	16.9U pg/L
	PCB 105	7.11 pg/L	7.11U pg/L
	PCB 110/115	26.1 pg/L	26.1U pg/L
	PCB 118	18.8 pg/L	18.8U pg/L
	Total Monochlorobiphenyls	6.20 pg/L	6.20U pg/L
	Total Dichlorobiphenyls	13.9 pg/L	13.9U pg/L
	Total Trichlorobiphenyls	10.6 pg/L	10.6U pg/L
	Total Pentachlorobiphenyls	105 pg/L	105U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55283-4	PCB 1	1.67 pg/L	1.67U pg/L
	PCB 2	1.39 pg/L	1.39U pg/L
	PCB 3	2.88 pg/L	2.88U pg/L
	PCB 8	1.76 pg/L	1.76U pg/L
	PCB 11	11.8 pg/L	11.8U pg/L
	PCB 15	1.69 pg/L	1.69U pg/L
	PCB 20/28	4.15 pg/L	4.15U pg/L
	PCB 31	2.43 pg/L	2.43U pg/L
	PCB 40	1.78 pg/L	1.78U pg/L
	PCB 61/70/74/76	19.5 pg/L	19.5U pg/L
	PCB 64	3.41 pg/L	3.41U pg/L
	PCB 84	4.40 pg/L	4.40U pg/L
	PCB 85/116/117	6.80 pg/L	6.80U pg/L
	PCB 86/87/97/108/119/125	13.2 pg/L	13.2U pg/L
	PCB 88/91	3.23 pg/L	3.23U pg/L
	PCB 90/101/113	25.3 pg/L	25.3U pg/L
	PCB 92	5.32 pg/L	5.32U pg/L
	PCB 93/95/98/100/102	12.8 pg/L	12.8U pg/L
	PCB 105	8.24 pg/L	8.24U pg/L
	PCB 110/115	22.5 pg/L	22.5U pg/L
	PCB 118	23.0 pg/L	23.0U pg/L
	PCB 128/166	2.86 pg/L	2.86U pg/L
	PCB 129/138/160/163	18.9 pg/L	18.9U pg/L
	PCB 132	3.55 pg/L	3.55U pg/L
	PCB 135/151/154	6.39 pg/L	6.39U pg/L
	Total Monochlorobiphenyls	5.94 pg/L	5.94U pg/L
	Total Dichlorobiphenyls	17.6 pg/L	17.6U pg/L
	Total Trichlorobiphenyls	15.1 pg/L	15.1U pg/L
	Total Pentachlorobiphenyls	149 pg/L	149U pg/L
L55283-6	PCB 1	1.88 pg/L	1.88U pg/L
	PCB 2	1.87 pg/L	1.87U pg/L
	PCB 3	3.32 pg/L	3.32U pg/L
	PCB 8	1.62 pg/L	1.62U pg/L
	PCB 11	15.0 pg/L	15.0U pg/L
	PCB 20/28	5.12 pg/L	5.12U pg/L
	PCB 22	1.27 pg/L	1.27U pg/L
	PCB 31	2.49 pg/L	2.49U pg/L
	PCB 61/70/74/76	13.1 pg/L	13.1U pg/L
	PCB 64	2.49 pg/L	2.49U pg/L
	PCB 66	6.72 pg/L	6.72U pg/L
	PCB 83/99	13.6 pg/L	13.6U pg/L
	PCB 85/116/117	3.88 pg/L	3.88U pg/L
	PCB 86/87/97/108/119/125	14.6 pg/L	14.6U pg/L
	PCB 88/91	2.87 pg/L	2.87U pg/L
	PCB 90/101/113	19.0 pg/L	19.0U pg/L
	PCB 92	3.54 pg/L	3.54U pg/L
	PCB 93/95/98/100/102	13.0 pg/L	13.0U pg/L
	PCB 105	8.48 pg/L	8.48U pg/L
	PCB 110/115	23.3 pg/L	23.3U pg/L
	PCB 118	20.0 pg/L	20.0U pg/L
	PCB 129/138/160/163	19.3 pg/L	19.3U pg/L
	PCB 132	6.65 pg/L	6.65U pg/L
	PCB 135/151/154	4.69 pg/L	4.69U pg/L
	PCB 153/168	13.0 pg/L	13.0U pg/L
	Total Monochlorobiphenyls	7.07 pg/L	7.07U pg/L
	Total Dichlorobiphenyls	19.1 pg/L	19.1U pg/L
	Total Pentachlorobiphenyls	123 pg/L	123U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55384-1	PCB 2	0.789 pg/L	0.789U pg/L
	PCB 3	2.25 pg/L	2.25U pg/L
	PCB 11	12.6 pg/L	12.6U pg/L
	PCB 15	1.90 pg/L	1.90U pg/L
	PCB 20/28	3.97 pg/L	3.97U pg/L
	PCB 22	1.00 pg/L	1.00U pg/L
	PCB 31	2.29 pg/L	2.29U pg/L
	PCB 40	3.96 pg/L	3.96U pg/L
	PCB 56	2.37 pg/L	2.37U pg/L
	PCB 61/70/74/76	15.0 pg/L	15.0U pg/L
	PCB 66	7.78 pg/L	7.78U pg/L
	PCB 84	7.38 pg/L	7.38U pg/L
	PCB 85/116/117	7.54 pg/L	7.54U pg/L
	PCB 86/87/97/108/119/125	23.2 pg/L	23.2U pg/L
	PCB 90/101/113	33.4 pg/L	33.4U pg/L
	PCB 92	6.68 pg/L	6.68U pg/L
	PCB 93/95/98/100/102	22.9 pg/L	22.9U pg/L
	Total Monochlorobiphenyls	3.04 pg/L	3.04U pg/L
	Total Dichlorobiphenyls	16.5 pg/L	16.5U pg/L
	Total Trichlorobiphenyls	12.2 pg/L	12.2U pg/L
	Total Pentachlorobiphenyls	220 pg/L	220U pg/L
L55384-2 (4X)	PCB 1	1.62 pg/L	1.62U pg/L
	PCB 2	1.93 pg/L	1.93U pg/L
	PCB 3	4.17 pg/L	4.17U pg/L
	PCB 8	5.87 pg/L	5.87U pg/L
	PCB 105	42.8 pg/L	42.8U pg/L
	Total Monochlorobiphenyls	7.72 pg/L	7.72U pg/L
L55384-3	PCB 2	1.89 pg/L	1.89U pg/L
	PCB 3	3.73 pg/L	3.73U pg/L
	PCB 8	2.61 pg/L	2.61U pg/L
	PCB 11	14.1 pg/L	14.1U pg/L
	PCB 15	2.46 pg/L	2.46U pg/L
	PCB 20/28	5.58 pg/L	5.58U pg/L
	PCB 22	1.81 pg/L	1.81U pg/L
	PCB 31	3.76 pg/L	3.76U pg/L
	PCB 40	2.21 pg/L	2.21U pg/L
	PCB 56	1.59 pg/L	1.59U pg/L
	PCB 61/70/74/76	9.90 pg/L	9.90U pg/L
	PCB 66	3.59 pg/L	3.59U pg/L
	PCB 83/99	8.83 pg/L	8.83U pg/L
	PCB 84	4.42 pg/L	4.42U pg/L
	PCB 85/116/117	2.18 pg/L	2.18U pg/L
	PCB 86/87/97/108/119/125	11.8 pg/L	11.8U pg/L
	PCB 90/101/113	14.7 pg/L	14.7U pg/L
	PCB 92	2.36 pg/L	2.36U pg/L
	PCB 93/95/98/100/102	12.8 pg/L	12.8U pg/L
	PCB 105	3.42 pg/L	3.42U pg/L
	PCB 110/115	16.8 pg/L	16.8U pg/L
	PCB 118	10.9 pg/L	10.9U pg/L
	PCB 128/166	1.75 pg/L	1.75U pg/L
	PCB 129/138/160/163	6.92 pg/L	6.92U pg/L
	PCB 135/151/154	4.08 pg/L	4.08U pg/L
	PCB 153/168	5.75 pg/L	5.75U pg/L
	Total Monochlorobiphenyls	5.62 pg/L	5.62U pg/L
	Total Dichlorobiphenyls	23.5 pg/L	23.5U pg/L
	Total Pentachlorobiphenyls	90.3 pg/L	90.3U pg/L
	Total Hexachlorobiphenyls	26.9 pg/L	26.9U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
L55384-4	PCB 1	1.64 pg/L	1.64U pg/L
	PCB 3	2.72 pg/L	2.72U pg/L
	PCB 8	1.56 pg/L	1.56U pg/L
	PCB 11	10.2 pg/L	10.2U pg/L
	PCB 15	1.70 pg/L	1.70U pg/L
	PCB 31	1.47 pg/L	1.47U pg/L
	PCB 40	1.40 pg/L	1.40U pg/L
	PCB 61/70/74/76	5.16 pg/L	5.16U pg/L
	PCB 84	2.32 pg/L	2.32U pg/L
	PCB 85/116/117	1.78 pg/L	1.78U pg/L
	PCB 86/87/97/108/119/125	6.73 pg/L	6.73U pg/L
	PCB 88/91	1.64 pg/L	1.64U pg/L
	PCB 90/101/113	7.02 pg/L	7.02U pg/L
	PCB 93/95/98/100/102	5.88 pg/L	5.88U pg/L
	PCB 105	2.51 pg/L	2.51U pg/L
	PCB 110/115	8.83 pg/L	8.83U pg/L
	PCB 118	5.15 pg/L	5.15U pg/L
	PCB 129/138/160/163	4.79 pg/L	4.79U pg/L
	PCB 132	2.03 pg/L	2.03U pg/L
	Total Monochlorobiphenyls	4.36 pg/L	4.36U pg/L
	Total Dichlorobiphenyls	14.8 pg/L	14.8U pg/L
	Total Trichlorobiphenyls Total	5.07 pg/L	5.07U pg/L
	Pentachlorobiphenyls	43.0 pg/L	43.0U pg/L
	Total Hexachlorobiphenyls	6.82 pg/L	6.82U pg/L
	Total Heptachlorobiphenyls	1.25 pg/L	1.25U pg/L

Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Compound	RPD (Limits)	Affected Compounds	Flag	A or P
L55284-3DUP (L55284-3 L55284-3DUP)	PCB 7	57.9 (≤50)	PCB 7 Total Dichlorobiphenyls	J (all detects)	A

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries (%R) were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG DPWG40324	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Data Qualification Summary - SDG DPWG40324

SDG	Sample	Compound	Flag	A or P	Reason
DPWG40324	L55284-3 L55284-3DUP	PCB 7 Total Dichlorobiphenyls	J (all detects)	A	Duplicate sample analysis (RPD)
DPWG40324	L54681-1 L54681-2 L54681-3 L54681-4 L54686-1 L54686-2 L54686-3 L54686-4 L54686-5 L54686-6 L55077-1 L55077-2 L55077-4 L55077-6 L55177-1 L55177-2 L55177-4 L55177-5 L55177-6 L54686-4DUP	All TCL compounds flagged "K" by the laboratory as estimated maximum possible concentration.	U	A	Compound quantitation and RLs (EMPC)

Lower Duwamish Waterway
Polychlorinated Biphenyls as Congeners - Laboratory Blank Data Qualification Summary - SDG DPWG40324

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55284-1	PCB 1	1.70U pg/L	A
		PCB 2	1.78U pg/L	
		PCB 3	3.20U pg/L	
		PCB 8	2.56U pg/L	
		PCB 11	14.0U pg/L	
		PCB 20/28	4.21U pg/L	
		PCB 31	2.69U pg/L	
		PCB 40	1.87U pg/L	
		PCB 56	1.55U pg/L	
		PCB 61/70/74/76	11.1U pg/L	
		PCB 64	1.96U pg/L	
		PCB 66	4.29U pg/L	
		PCB 83/99	10.6U pg/L	
		PCB 84	3.87U pg/L	
		PCB 85/116/117	3.50U pg/L	
		PCB 86/87/97/108/119/125	11.7U pg/L	
		PCB 88/91	1.71U pg/L	
		PCB 90/101/113	18.2U pg/L	
		PCB 93/95/98/100/102	12.0U pg/L	
		PCB 105	5.67U pg/L	
		PCB 110/115	18.6U pg/L	
		PCB 118	15.1U pg/L	
		PCB 128/166	2.66U pg/L	
		PCB 129/138/160/163	12.7U pg/L	
		PCB 132	4.13U pg/L	
		PCB 153/168	10.5U pg/L	
		Total Monochlorobiphenyls	6.68U pg/L	
		Total Dichlorobiphenyls	16.6U pg/L	
		Total Trichlorobiphenyls	15.5U pg/L	
		Total Pentachlorobiphenyls	103U pg/L	
		Total Hexachlorobiphenyls	45.0U pg/L	
		Total Heptachlorobiphenyls	1.61U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55284-2	PCB 1 PCB 2 PCB 8 PCB 11 PCB 15 PCB 20/28 PCB 22 PCB 31 PCB 40 PCB 56 PCB 61/70/74/76 PCB 64 PCB 66 PCB 85/116/117 PCB 88/91 PCB 90/101/113 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 128/166 PCB 129/138/160/163 PCB 132 PCB 153/168 PCB 187 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls Total Heptachlorobiphenyls	2.10U pg/L 2.17U pg/L 1.83U pg/L 11.2U pg/L 3.11U pg/L 6.86U pg/L 2.28U pg/L 4.34U pg/L 2.58U pg/L 2.03U pg/L 9.90U pg/L 2.99U pg/L 4.85U pg/L 2.48U pg/L 1.46U pg/L 11.1U pg/L 7.50U pg/L 3.24U pg/L 10.0U pg/L 6.92U pg/L 1.62U pg/L 7.46U pg/L 2.67U pg/L 7.09U pg/L 2.36U pg/L 4.27U pg/L 17.3U pg/L 42.7U pg/L 24.6U pg/L 5.49U pg/L	A
DPWG40324	L55284-3	PCB 1 PCB 2 PCB 3 PCB 8 PCB 11 PCB 15 PCB 20/28 PCB 22 PCB 31 PCB 40 PCB 61/70/74/76 PCB 64 PCB 66 PCB 83/99 PCB 84 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 88/91 PCB 90/101/113 PCB 92 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 128/166 PCB 129/138/160/163 PCB 132 PCB 135/151/154 PCB 187 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls	1.02U pg/L 1.16U pg/L 2.89U pg/L 1.97U pg/L 13.1U pg/L 1.44U pg/L 3.15U pg/L 1.01U pg/L 2.28U pg/L 2.39U pg/L 9.95U pg/L 1.89U pg/L 4.58U pg/L 10.3U pg/L 4.17U pg/L 3.22U pg/L 11.3U pg/L 2.55U pg/L 18.8U pg/L 2.97U pg/L 13.6U pg/L 4.89U pg/L 19.0U pg/L 12.3U pg/L 3.28U pg/L 18.2U pg/L 5.41U pg/L 5.93U pg/L 5.57U pg/L 5.07U pg/L 18.2U pg/L 13.3U pg/L 103U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55284-3DUP	PCB 1	1.28U pg/L	A
		PCB 8	1.67U pg/L	
		PCB 11	13.4U pg/L	
		PCB 15	1.40U pg/L	
		PCB 20/28	2.98U pg/L	
		PCB 22	0.960U pg/L	
		PCB 40	1.91U pg/L	
		PCB 56	1.88U pg/L	
		PCB 61/70/74/76	9.28U pg/L	
		PCB 64	1.51U pg/L	
		PCB 66	3.95U pg/L	
		PCB 83/99	10.8U pg/L	
		PCB 84	3.65U pg/L	
		PCB 86/87/97/108/119/125	11.1U pg/L	
		PCB 90/101/113	17.0U pg/L	
		PCB 92	2.89U pg/L	
		PCB 93/95/98/100/102	11.1U pg/L	
		PCB 105	4.79U pg/L	
		PCB 110/115	16.7U pg/L	
		PCB 118	11.5U pg/L	
		PCB 128/166	3.33U pg/L	
		PCB 129/138/160/163	17.0U pg/L	
		PCB 132	4.88U pg/L	
		PCB 135/151/154	4.55U pg/L	
		PCB 153/168	15.4U pg/L	
		PCB 187	5.55U pg/L	
		Total Monochlorobiphenyls	1.28U pg/L	
		Total Dichlorobiphenyls	18.5U pg/L	
		Total Trichlorobiphenyls	11.7U pg/L	
		Total Pentachlorobiphenyls	90.5U pg/L	
DPWG40324	L55284-4	PCB 1	1.45U pg/L	A
		PCB 2	1.42U pg/L	
		PCB 3	2.66U pg/L	
		PCB 11	11.3U pg/L	
		PCB 15	1.29U pg/L	
		PCB 20/28	2.98U pg/L	
		PCB 31	1.62U pg/L	
		PCB 56	1.72U pg/L	
		PCB 61/70/74/76	9.61U pg/L	
		PCB 64	1.73U pg/L	
		PCB 83/99	8.59U pg/L	
		PCB 84	3.82U pg/L	
		PCB 86/87/97/108/119/125	11.5U pg/L	
		PCB 88/91	1.92U pg/L	
		PCB 90/101/113	13.1U pg/L	
		PCB 92	2.20U pg/L	
		PCB 93/95/98/100/102	10.1U pg/L	
		PCB 105	8.21U pg/L	
		PCB 110/115	18.3U pg/L	
		PCB 118	17.5U pg/L	
		PCB 132	5.05U pg/L	
		PCB 135/151/154	4.76U pg/L	
		Total Monochlorobiphenyls	5.53U pg/L	
		Total Dichlorobiphenyls	12.6U pg/L	
		Total Trichlorobiphenyls	10.9U pg/L	
		Total Pentachlorobiphenyls	99.6U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55284-5	PCB 1	1.51U pg/L	A
		PCB 2	1.78U pg/L	
		PCB 3	3.06U pg/L	
		PCB 8	1.57U pg/L	
		PCB 11	12.3U pg/L	
		PCB 15	2.77U pg/L	
		PCB 20/28	4.16U pg/L	
		PCB 22	0.678U pg/L	
		PCB 31	2.04U pg/L	
		PCB 56	2.39U pg/L	
		PCB 61/70/74/76	13.0U pg/L	
		PCB 64	4.41U pg/L	
		PCB 66	6.05U pg/L	
		PCB 83/99	15.4U pg/L	
		PCB 84	8.60U pg/L	
		PCB 85/116/117	5.33U pg/L	
		PCB 86/87/97/108/119/125	20.9U pg/L	
		PCB 88/91	3.66U pg/L	
		PCB 90/101/113	28.9U pg/L	
		PCB 92	5.15U pg/L	
		PCB 105	11.4U pg/L	
		PCB 110/115	37.5U pg/L	
		PCB 118	24.1U pg/L	
		Total Monochlorobiphenyls	6.35U pg/L	
		Total Dichlorobiphenyls	18.7U pg/L	
		Total Pentachlorobiphenyls	194U pg/L	
DPWG40324	L55284-6	PCB 1	0.645U pg/L	A
		PCB 2	0.730U pg/L	
		PCB 3	2.03U pg/L	
		PCB 8	2.35U pg/L	
		PCB 11	15.2U pg/L	
		PCB 20/28	6.01U pg/L	
		PCB 31	3.47U pg/L	
		PCB 40	2.62U pg/L	
		PCB 56	2.00U pg/L	
		PCB 61/70/74/76	13.7U pg/L	
		PCB 64	2.79U pg/L	
		PCB 66	5.50U pg/L	
		PCB 83/99	12.5U pg/L	
		PCB 84	4.48U pg/L	
		PCB 86/87/97/108/119/125	12.7U pg/L	
		PCB 88/91	2.85U pg/L	
		PCB 90/101/113	19.4U pg/L	
		PCB 92	3.49U pg/L	
		PCB 93/95/98/100/102	14.6U pg/L	
		PCB 105	6.28U pg/L	
		PCB 110/115	20.3U pg/L	
		PCB 118	17.4U pg/L	
		PCB 129/138/160/163	16.2U pg/L	
		PCB 132	5.82U pg/L	
		PCB 153/168	12.4U pg/L	
		PCB 187	4.42U pg/L	
		Total Monochlorobiphenyls	3.41U pg/L	
		Total Dichlorobiphenyls	18.9U pg/L	
		Total Pentachlorobiphenyls	117U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55283-1	PCB 1	1.69U pg/L	A
		PCB 2	2.19U pg/L	
		PCB 3	3.29U pg/L	
		PCB 8	2.33U pg/L	
		PCB 11	12.9U pg/L	
		PCB 15	1.84U pg/L	
		PCB 20/28	4.79U pg/L	
		PCB 22	1.20U pg/L	
		PCB 31	2.65U pg/L	
		PCB 40	1.87U pg/L	
		PCB 56	1.52U pg/L	
		PCB 61/70/74/76	10.2U pg/L	
		PCB 66	4.40U pg/L	
		PCB 83/99	9.84U pg/L	
		PCB 85/116/117	2.98U pg/L	
		PCB 86/87/97/108/119/125	10.7U pg/L	
		PCB 88/91	1.92U pg/L	
		PCB 90/101/113	15.2U pg/L	
		PCB 92	2.48U pg/L	
		PCB 93/95/98/100/102	11.8U pg/L	
		PCB 105	5.27U pg/L	
		PCB 110/115	16.5U pg/L	
		PCB 118	14.0U pg/L	
		PCB 129/138/160/163	11.2U pg/L	
		PCB 135/151/154	4.13U pg/L	
		PCB 153/168	9.03U pg/L	
		PCB 187	2.40U pg/L	
		Total Monochlorobiphenyls	7.17U pg/L	
		Total Dichlorobiphenyls	18.6U pg/L	
		Total Pentachlorobiphenyls	91.8U pg/L	
		Total Hexachlorobiphenyls	39.2U pg/L	
		Total Heptachlorobiphenyls	4.67U pg/L	
DPWG40324	L55283-2	PCB 1	1.71U pg/L	A
		PCB 2	1.87U pg/L	
		PCB 3	3.11U pg/L	
		PCB 8	2.23U pg/L	
		PCB 11	11.6U pg/L	
		PCB 15	2.87U pg/L	
		PCB 31	5.47U pg/L	
		PCB 56	2.76U pg/L	
		PCB 61/70/74/76	11.2U pg/L	
		PCB 64	3.66U pg/L	
		PCB 66	4.78U pg/L	
		PCB 83/99	5.76U pg/L	
		PCB 85/116/117	2.13U pg/L	
		PCB 86/87/97/108/119/125	7.42U pg/L	
		PCB 90/101/113	9.00U pg/L	
		PCB 93/95/98/100/102	8.42U pg/L	
		PCB 105	2.81U pg/L	
		PCB 110/115	11.4U pg/L	
		PCB 118	7.11U pg/L	
		PCB 128/166	1.46U pg/L	
		PCB 129/138/160/163	6.76U pg/L	
		PCB 132	2.21U pg/L	
		PCB 135/151/154	2.39U pg/L	
		PCB 153/168	5.64U pg/L	
		PCB 187	2.04U pg/L	
		Total Monochlorobiphenyls	6.69U pg/L	
		Total Dichlorobiphenyls	19.5U pg/L	
		Total Pentachlorobiphenyls	54.8U pg/L	
		Total Hexachlorobiphenyls	26.6U pg/L	
		Total Heptachlorobiphenyls	2.04U pg/L	

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55283-3	PCB 1 PCB 2 PCB 3 PCB 8 PCB 11 PCB 20/28 PCB 22 PCB 31 PCB 40 PCB 61/70/74/76 PCB 66 PCB 83/99 PCB 84 PCB 86/87/97/108/119/125 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls	1.55U pg/L 1.72U pg/L 2.93U pg/L 1.77U pg/L 11.0U pg/L 3.60U pg/L 1.06U pg/L 2.06U pg/L 2.66U pg/L 11.9U pg/L 5.11U pg/L 13.6U pg/L 4.59U pg/L 15.3U pg/L 16.9U pg/L 7.11U pg/L 26.1U pg/L 18.8U pg/L 6.20U pg/L 13.9U pg/L 10.6U pg/L 105U pg/L	A
DPWG40324	L55283-4	PCB 1 PCB 2 PCB 3 PCB 8 PCB 11 PCB 15 PCB 20/28 PCB 31 PCB 40 PCB 61/70/74/76 PCB 64 PCB 84 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 88/91 PCB 90/101/113 PCB 92 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 128/166 PCB 129/138/160/163 PCB 132 PCB 135/151/154 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls	1.67U pg/L 1.39U pg/L 2.88U pg/L 1.76U pg/L 11.8U pg/L 1.69U pg/L 4.15U pg/L 2.43U pg/L 1.78U pg/L 19.5U pg/L 3.41U pg/L 4.40U pg/L 6.80U pg/L 13.2U pg/L 3.23U pg/L 25.3U pg/L 5.32U pg/L 12.8U pg/L 8.24U pg/L 22.5U pg/L 23.0U pg/L 2.86U pg/L 18.9U pg/L 3.55U pg/L 6.39U pg/L 5.94U pg/L 17.6U pg/L 15.1U pg/L 149U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55283-6	PCB 1 PCB 2 PCB 3 PCB 8 PCB 11 PCB 20/28 PCB 22 PCB 31 PCB 61/70/74/76 PCB 64 PCB 66 PCB 83/99 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 88/91 PCB 90/101/113 PCB 92 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 129/138/160/163 PCB 132 PCB 135/151/154 PCB 153/168 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Pentachlorobiphenyls	1.88U pg/L 1.87U pg/L 3.32U pg/L 1.62U pg/L 15.0U pg/L 5.12U pg/L 1.27U pg/L 2.49U pg/L 13.1U pg/L 2.49U pg/L 6.72U pg/L 13.6U pg/L 3.88U pg/L 14.6U pg/L 2.87U pg/L 19.0U pg/L 3.54U pg/L 13.0U pg/L 8.48U pg/L 23.3U pg/L 20.0U pg/L 19.3U pg/L 6.65U pg/L 4.69U pg/L 13.0U pg/L 7.07U pg/L 19.1U pg/L 123U pg/L	A
DPWG40324	L55384-1	PCB 2 PCB 3 PCB 11 PCB 15 PCB 20/28 PCB 22 PCB 31 PCB 40 PCB 56 PCB 61/70/74/76 PCB 66 PCB 84 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 90/101/113 PCB 92 PCB 93/95/98/100/102 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls	0.789U pg/L 2.25U pg/L 12.6U pg/L 1.90U pg/L 3.97U pg/L 1.00U pg/L 2.29U pg/L 3.96U pg/L 2.37U pg/L 15.0U pg/L 7.78U pg/L 7.38U pg/L 7.54U pg/L 23.2U pg/L 33.4U pg/L 6.68U pg/L 22.9U pg/L 3.04U pg/L 16.5U pg/L 12.2U pg/L 220U pg/L	A
DPWG40324	L55384-2 (4X)	PCB 1 PCB 2 PCB 3 PCB 8 PCB 105 Total Monochlorobiphenyls	1.62U pg/L 1.93U pg/L 4.17U pg/L 5.87U pg/L 42.8U pg/L 7.72U pg/L	A

SDG	Sample	Compound	Modified Final Concentration	A or P
DPWG40324	L55384-3	PCB 2 PCB 3 PCB 8 PCB 11 PCB 15 PCB 20/28 PCB 22 PCB 31 PCB 40 PCB 56 PCB 61/70/74/76 PCB 66 PCB 83/99 PCB 84 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 90/101/113 PCB 92 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 128/166 PCB 129/138/160/163 PCB 135/151/154 PCB 153/168 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls	1.89U pg/L 3.73U pg/L 2.61U pg/L 14.1U pg/L 2.46U pg/L 5.58U pg/L 1.81U pg/L 3.76U pg/L 2.21U pg/L 1.59U pg/L 9.90U pg/L 3.59U pg/L 8.83U pg/L 4.42U pg/L 2.18U pg/L 11.8U pg/L 14.7U pg/L 2.36U pg/L 12.8U pg/L 3.42U pg/L 16.8U pg/L 10.9U pg/L 1.75U pg/L 6.92U pg/L 4.08U pg/L 5.75U pg/L 5.62U pg/L 23.5U pg/L 90.3U pg/L 26.9U pg/L	A
DPWG40324	L55384-4	PCB 1 PCB 3 PCB 8 PCB 11 PCB 15 PCB 31 PCB 40 PCB 61/70/74/76 PCB 84 PCB 85/116/117 PCB 86/87/97/108/119/125 PCB 88/91 PCB 90/101/113 PCB 93/95/98/100/102 PCB 105 PCB 110/115 PCB 118 PCB 129/138/160/163 PCB 132 Total Monochlorobiphenyls Total Dichlorobiphenyls Total Trichlorobiphenyls Total Pentachlorobiphenyls Total Hexachlorobiphenyls Total Heptachlorobiphenyls	1.64U pg/L 2.72U pg/L 1.56U pg/L 10.2U pg/L 1.70U pg/L 1.47U pg/L 1.40U pg/L 5.16U pg/L 2.32U pg/L 1.78U pg/L 6.73U pg/L 1.64U pg/L 7.02U pg/L 5.88U pg/L 2.51U pg/L 8.83U pg/L 5.15U pg/L 4.79U pg/L 2.03U pg/L 4.36U pg/L 14.8U pg/L 5.07U pg/L 43.0U pg/L 6.82U pg/L 1.25U pg/L	A

LDC #: 28363J31 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/9/12

SDG #: DPWG40324 Level III Page: 1 of 1

Laboratory: ~~Analytical Perspectives~~ AXYS Reviewer: Q

2nd Reviewer: V

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 3/10 - 29/12
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	≤20
IV.	Routine calibration/~~ICV~~	A	30/≤50
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates /DUP	N/SW	
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitationRL/~~LOQ/LODs~~	~~A~~N	
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:
all H2O

1	L55284-1	11	L55283-6	21	WG40069-101	31	
2	L55284-2	12	L55384-1	22		32	
3	L55284-3	13	L55384-2	23		33	
4	L55284-4	14	L55384-3	24		34	
5	L55284-5	15	L55384-4	25		35	
6	L55284-6	16	L55284-3DUP	26		36	
7	L55283-1	17		27		37	
8	L55283-2	18		28		38	
9	L55283-3	19		29		39	
10	L55283-4	20		30		40	

LDC #: 28363J31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)

Blank extraction date: 5/24/12 **Blank analysis date:** 6/4/12
Conc. units: pg/L **Associated samples:** All Qual U

Compound	Blank ID	Sample Identification											
	WG40069-101	5X	1	2	3	16	4	5	6	7	8	9	10
PCB 1	1.16	5.8	1.70	2.10	1.02	1.28	1.45	1.51	0.645	1.69	1.71	1.55	1.67
PCB 2	1.22	6.1	1.78	2.17	1.16		1.42	1.78	0.730	2.19	1.87	1.72	1.39
PCB 3	2.32	11.6	3.20		2.89		2.66	3.06	2.03	3.29	3.11	2.93	2.88
PCB 8	1.38	6.9	2.56	1.83	1.97	1.67		1.57	2.35	2.33	2.23	1.77	1.76
PCB 11	9.80	49	14.0	11.2	13.1	13.4	11.3	12.3	15.2	12.9	11.6	11.0	11.8
PCB 15	1.24	6.2		3.11	1.44	1.40	1.29	2.77		1.84	2.87		1.69
PCB 20/28	1.54	7.7	4.21	6.86	3.15	2.98	2.98	4.16	6.01	4.79		3.60	4.15
PCB 22	0.650	3.25		2.28	1.01	0.960		0.678		1.20		1.06	
PCB 31	1.14	5.7	2.69	4.34	2.28		1.62	2.04	3.47	~~1.20~~ 2.65	5.47	2.06	2.43
PCB 40	0.807	4.035	1.87	2.58	2.39	1.91			2.62	1.87		2.66	1.78
PCB 56	1.02	5.1	1.55	2.03		1.88	1.72	2.39	2.00	1.52	2.76		
PCB 61/70/74/76	6.30	31.5	11.1	9.90	9.95	9.28	9.61	13.0	13.7	10.2	11.2	11.9	19.5
PCB 64	0.941	4.705	1.96	2.99	1.89	1.51	1.73	4.41	2.79		3.66		3.41
PCB 66	2.12	10.6	4.29	4.85	4.58	3.95		6.05	5.50	4.40	4.78	5.11	
PCB 83/99	3.54	17.7	10.6		10.3	10.8	8.59	15.4	12.5	9.84	5.76	13.6	
PCB 84	2.28	11.4	3.87		4.17	3.65	3.82	8.60	4.48			4.59	4.40
PCB 85/116/117	1.67	8.35	3.50	2.48	3.22			5.33		2.98	2.13		6.80
PCB 86/87/97/108/119/125	6.01	30.05	11.7		11.3	11.1	11.5	20.9	12.7	10.7	7.42	15.3	13.2
PCB 88/91	0.766	3.83	1.71	1.46	2.55		1.92	3.66	2.85	1.92			3.23
PCB 90/101/113	7.65	38.25	18.2	11.1	18.8	17.0	13.1	28.9	19.4	15.2	9.00		25.3
PCB 92	1.40	7			2.97	2.89	2.20	5.15	3.49	2.48			5.32
PCB 93/95/98/100/102	5.09	25.45	12.0	7.50	13.6	11.1	10.1		14.6	11.8	8.42	16.9	12.8
PCB 105	2.61	13.05	5.67	3.24	4.89	4.79	8.21	11.4	6.28	5.27	2.81	7.11	8.24

Compound	Blank ID	Sample Identification											
	WG40069-101	5X	1	2	3	16	4	5	6	7	8	9	10
PCB 110/115	7.87	39.35	18.6	10.0	19.0	16.7	18.3	37.5	20.3	16.5	11.4	26.1	22.5
PCB 118	5.73	28.65	15.1	6.92	12.3	11.5	17.5	24.1	17.4	14.0	7.11	18.8	23.0
PCB 128/166	0.697	3.485	2.66	1.62	3.28	3.33					1.46		2.86
PCB 129/138/160/163	4.13	20.65	12.7	7.46	18.2	17.0			16.2	11.2	6.76		18.9
PCB 132	1.35	6.75	4.13	2.67	5.41	4.88	5.05		5.82		2.21		3.55
PCB 135/151/154	1.40	7			5.93	4.55	4.76			4.13	2.39		6.39
PCB 153/168	3.27	16.35	10.5	7.09		15.4			12.4	9.03	5.64		
PCB 187	1.19	5.95		2.36	5.57	5.55			4.42	2.40	2.04		
Total Monochlorobiphenyls	4.70	23.5	6.68	4.27	5.07	1.28	5.53	6.35	3.41	7.17	6.69	6.20	5.94
Total Dichlorobiphenyls	12.4	62	16.6	17.3	18.2	18.5	12.6	18.7	18.9	18.6	19.5	13.9	17.6
Total Trichlorobiphenyls	3.33	16.65	15.5		13.3	11.7	10.9					10.6	15.1
Total Tetrachlorobiphenyls	11.2	56											
Total Pentachlorobiphenyls	44.6	223	103	42.7	103	90.5	99.6	194	117	91.8	54.8	105	149
Total Hexachlorobiphenyls	10.8	54	45.0	24.6						39.2	26.6		
Total Heptachlorobiphenyls	1.19	5.95	1.61	5.49						4.67	2.04		
Total PCBs	88.3	441.5									~~356~~		

*Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentr/ation were qualified as not detected, "U".

LDC #: 28363J31

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: Q
2nd Reviewer: ⌐

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668A)

Blank extraction date: 5/24/12 **Blank analysis date:** 6/4/12
Conc. units: pg/L **Associated samples:** All Qual U

Compound	Blank ID	Sample Identification											
	WG40069-101	5X	11	12	13	14	15						
PCB 1	1.16	5.8	1.88		1.62		1.64						
PCB 2	1.22	6.1	1.87	0.789	1.93	1.89							
PCB 3	2.32	11.6	3.32	2.25	4.17	3.73	2.72						
PCB 8	1.38	6.9	1.62		5.87	2.61	1.56						
PCB 11	9.80	49	15.0	12.6		14.1	10.2						
PCB 15	1.24	6.2		1.90		2.46	1.70						
PCB 20/28	1.54	7.7	5.12	3.97		5.58							
PCB 22	0.650	3.25	1.27	1.00		1.81							
PCB 31	1.14	5.7	2.49	2.29		3.76	1.47						
PCB 40	0.807	4.035		3.96		2.21	1.40						
PCB 56	1.02	5.1		2.37		1.59							
PCB 61/70/74/76	6.30	31.5	13.1	15.0		9.90	5.16						
PCB 64	0.941	4.705	2.49										
PCB 66	2.12	10.6	6.72	7.78		3.59							
PCB 83/99	3.54	17.7	13.6			8.83							
PCB 84	2.28	11.4		7.38		4.42	2.32						
PCB 85/116/117	1.67	8.35	3.88	7.54		2.18	1.78						
PCB 86/87/97/108/119/125	6.01	30.05	14.6	23.2		11.8	6.73						
PCB 88/91	0.766	3.83	2.87				1.64						
PCB 90/101/113	7.65	38.25	19.0	33.4		14.7	7.02						
PCB 92	1.40	7	3.54	6.68		2.36							
PCB 93/95/98/100/102	5.09	25.45	13.0	22.9		12.8	5.88						
PCB 105	2.61	13.05	8.48		42.8 (4X)	3.42	2.51						

Compound	Blank ID	Sample Identification											
	WG40069-101	5X	11	12	13	14	15						
PCB 110/115	7.87	39.35	23.3			16.8	8.83						
PCB 118	5.73	28.65	20.0			10.9	5.15						
PCB 128/166	0.697	3.485				1.75							
PCB 129/138/160/163	4.13	20.65	19.3			6.92	4.79						
PCB 132	1.35	6.75	6.65				2.03						
PCB 135/151/154	1.40	7	4.69			4.08							
PCB 153/168	3.27	16.35	13.0			5.75							
PCB 187	1.19	5.95											
Total Monochlorobiphenyls	4.70	23.5	7.07	3.04	7.72	5.62	4.36						
Total Dichlorobiphenyls	12.4	62	19.1	16.5		23.5	14.8						
Total Trichlorobiphenyls	3.33	16.65		12.2			5.07						
Total Tetrachlorobiphenyls	11.2	56											
Total Pentachlorobiphenyls	44.6	223	123	220		90.3	43.0						
Total Hexachlorobiphenyls	10.8	54				26.9	6.82						
Total Heptachlorobiphenyls	1.19	5.95					1.25						
Total PCBs	88.3	441.5				~~352~~	~~238~~						

*Method blank results flagged "K" by the laboratory as estimated maximum possible concentration (EMPC) were considered not detected.

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentr/ation were qualified as not detected, "U".

LDC #: 28363I31

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: T
2nd Reviewer: L

METHOD: HRGC/HRMS Polychlorinated Biphenyls (EPA Method 1668B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.
Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?
Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		16	PCB 7	( )	( )	57.9 (≤50)	3. 16	J dets/A *
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )	* also qual Total Dichlorobiphenyls	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 28363I31

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and RLs

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		all	k-flag - EMPC results		U/A

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Appendix D: Relationships Between Parameters

Appendix D

Table D-1. Relationships Between Parameters - Correlation Analysis Results

Site	Count	Flow Condition	Parameter	Analyte	Correlation	R_s	p value	Significant?
Mainstem Combined	6	Storm	DOC	Anthracene	Spearman	0.058	0.919	No
Mainstem Combined	6	Storm	Mean Flow	Anthracene	Spearman	0.812	0.0583	No
Mainstem Combined	6	Storm	Precipitation	Anthracene	Spearman	-0.145	0.714	No
Mainstem Combined	6	Storm	TOC	Anthracene	Spearman	0.696	0.136	No
Mainstem Combined	6	Storm	TSS	Anthracene	Spearman	0.638	0.175	No
Soos,Newaukum&Mill Creek	**15**	**Storm**	**DOC**	**Anthracene**	**Spearman**	**0.738**	**0.00116**	**Yes**
Soos,Newaukum&Mill Creek	**15**	**Storm**	**Mean Flow**	**Anthracene**	**Spearman**	**-0.523**	**0.0429**	**Yes**
Soos,Newaukum&Mill Creek	15	Storm	Precipitation	Anthracene	Spearman	0.0162	0.944	No
Soos,Newaukum&Mill Creek	**15**	**Storm**	**TOC**	**Anthracene**	**Spearman**	**0.767**	**0.000308**	**Yes**
Soos,Newaukum&Mill Creek	**15**	**Storm**	**TSS**	**Anthracene**	**Spearman**	**0.63**	**0.0116**	**Yes**
Mainstem Combined	12	Storm	DOC	Arsenic, Dissolved	Spearman	0.107	0.733	No
Mainstem Combined	12	Storm	Mean Flow	Arsenic, Dissolved	Spearman	-0.282	0.364	No
Mainstem Combined	12	Storm	Precipitation	Arsenic, Dissolved	Pearson	0.185	0.566	No
Mainstem Combined	12	Storm	TOC	Arsenic, Dissolved	Pearson	0.0262	0.936	No
Mainstem Combined	12	Storm	TSS	Arsenic, Dissolved	Spearman	-0.285	0.352	No
Soos,Newaukum&Mill Creek	18	Storm	DOC	Arsenic, Dissolved	Pearson	0.299	0.229	No
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	Arsenic, Dissolved	Pearson	-0.306	0.217	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	Arsenic, Dissolved	Spearman	-0.0848	0.729	No
Soos,Newaukum&Mill Creek	18	Storm	TOC	Arsenic, Dissolved	Pearson	0.313	0.206	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TSS**	**Arsenic, Dissolved**	**Spearman**	**0.548**	**0.0184**	**Yes**
Mainstem Combined	12	Storm	DOC	Arsenic, Particulate Estimate	Spearman	0.559	0.547	No
Mainstem Combined	**12**	**Storm**	**Mean Flow**	**Arsenic, Particulate Estimate**	**Spearman**	**0.804**	**0.00036**	**Yes**
Mainstem Combined	12	Storm	Precipitation	Arsenic, Particulate Estimate	Spearman	-0.308	0.0317	No
Mainstem Combined	**12**	**Storm**	**TOC**	**Arsenic, Particulate Estimate**	**Spearman**	**0.727**	**0.0062**	**Yes**
Mainstem Combined	**12**	**Storm**	**TSS**	**Arsenic, Particulate Estimate**	**Spearman**	**0.909**	**0.0000002**	**Yes**
Soos,Newaukum&Mill Creek	18	Storm	DOC	Arsenic, Particulate Estimate	Spearman	0.364	0.134	No
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	Arsenic, Particulate Estimate	Spearman	-0.412	0.0873	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	Arsenic, Particulate Estimate	Spearman	0.279	0.255	No
Soos,Newaukum&Mill Creek	18	Storm	TOC	Arsenic, Particulate Estimate	Pearson	-0.0667	0.793	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TSS**	**Arsenic, Particulate Estimate**	**Spearman**	**0.625**	**0.00556**	**Yes**

Table D-1. Relationships Between Parameters - Correlation Analysis Results

Site	Count	Flow Condition	Parameter	Analyte	Correlation	R_s	p value	Significant?
Mainstem Combined	12	Storm	DOC	Arsenic, Total	Spearman	0.559	0.0547	No
Mainstem Combined	**12**	**Storm**	**Mean Flow**	**Arsenic, Total**	**Spearman**	**0.79**	**0.001**	**Yes**
Mainstem Combined	12	Storm	Precipitation	Arsenic, Total	Spearman	-0.308	0.0317	No
Mainstem Combined	**12**	**Storm**	**TOC**	**Arsenic, Total**	**Spearman**	**0.727**	**0.0062**	**Yes**
Mainstem Combined	**12**	**Storm**	**TSS**	**Arsenic, Total**	**Spearman**	**0.909**	**0.0000002**	**Yes**
Soos,Newaukum&Mill Creek	**18**	**Storm**	**DOC**	**Arsenic, Total**	**Spearman**	**0.5**	**0.0338**	**Yes**
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	Arsenic, Total	Spearman	-0.464	0.0516	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	Arsenic, Total	Spearman	0.132	0.592	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TOC**	**Arsenic, Total**	**Spearman**	**0.586**	**0.0103**	**Yes**
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TSS**	**Arsenic, Total**	**Spearman**	**0.75**	**0.0000999**	**Yes**
Mainstem Combined	7	Storm	DOC	Benzo(g,h,i)perylene	Spearman	-0.018	0.905	No
Mainstem Combined	7	Storm	Mean Flow	Benzo(g,h,i)perylene	Spearman	0.0721	0.843	No
Mainstem Combined	7	Storm	Precipitation	Benzo(g,h,i)perylene	Pearson	0.22	0.635	No
Mainstem Combined	**7**	**Storm**	**TOC**	**Benzo(g,h,i)perylene**	**Pearson**	**0.783**	**0.0371**	**Yes**
Mainstem Combined	7	Storm	TSS	Benzo(g,h,i)perylene	Spearman	0.306	0.438	No
Soos,Newaukum&Mill Creek	9	Storm	DOC	Benzo(g,h,i)perylene	Spearman	0.567	0.0988	No
Soos,Newaukum&Mill Creek	**9**	**Storm**	**Mean Flow**	**Benzo(g,h,i)perylene**	**Spearman**	**-0.75**	**0.0158**	**Yes**
Soos,Newaukum&Mill Creek	9	Storm	Precipitation	Benzo(g,h,i)perylene	Spearman	-0.183	0.612	No
Soos,Newaukum&Mill Creek	9	Storm	TOC	Benzo(g,h,i)perylene	Spearman	0.45	0.204	No
Soos,Newaukum&Mill Creek	9	Storm	TSS	Benzo(g,h,i)perylene	Spearman	0.55	0.111	No
Mainstem Combined	8	Storm	DOC	Chrysene	Spearman	0.18	0.619	No
Mainstem Combined	8	Storm	Mean Flow	Chrysene	Spearman	-0.335	0.387	No
Mainstem Combined	8	Storm	Precipitation	Chrysene	Pearson	0.165	0.697	No
Mainstem Combined	8	Storm	TOC	Chrysene	Pearson	0.659	0.0755	No
Mainstem Combined	8	Storm	TSS	Chrysene	Spearman	0.0479	0.885	No
Soos,Newaukum&Mill Creek	**16**	**Storm**	**DOC**	**Chrysene**	**Spearman**	**0.732**	**0.000895**	**Yes**
Soos,Newaukum&Mill Creek	**16**	**Storm**	**Mean Flow**	**Chrysene**	**Spearman**	**-0.525**	**0.0364**	**Yes**
Soos,Newaukum&Mill Creek	16	Storm	Precipitation	Chrysene	Spearman	0.167	0.526	No
Soos,Newaukum&Mill Creek	**16**	**Storm**	**TOC**	**Chrysene**	**Spearman**	**0.763**	**0.000159**	**Yes**
Soos,Newaukum&Mill Creek	**16**	**Storm**	**TSS**	**Chrysene**	**Spearman**	**0.742**	**0.000644**	**Yes**
Mainstem Combined	**12**	**Storm**	**Mean Flow**	**DOC**	**Spearman**	**0.615**	**0.0308**	**Yes**
Mainstem Combined	12	Storm	Precipitation	DOC	Spearman	-0.2	0.513	No
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	DOC	Pearson	-0.257	0.303	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	DOC	Spearman	0.185	0.456	No

Table D-1. Relationships Between Parameters - Correlation Analysis Results

Site	Count	Flow Condition	Parameter	Analyte	Correlation	R_s	p value	Significant?
Mainstem Combined	12	Storm	DOC	HPAH, Total	Spearman	0.399	0.189	No
Mainstem Combined	12	Storm	Mean Flow	HPAH, Total	Spearman	0.146	0.635	No
Mainstem Combined	12	Storm	Precipitation	HPAH, Total	Spearman	-0.153	0.619	No
Mainstem Combined	12	Storm	TOC	HPAH, Total	Spearman	0.363	0.233	No
Mainstem Combined	12	Storm	TSS	HPAH, Total	Spearman	0.356	0.243	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**DOC**	**HPAH, Total**	**Spearman**	**0.591**	**0.00969**	**Yes**
Soos,Newaukum&Mill Creek	**18**	**Storm**	**Mean Flow**	**HPAH, Total**	**Spearman**	**-0.581**	**0.0114**	**Yes**
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	HPAH, Total	Spearman	0.0269	0.908	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TOC**	**HPAH, Total**	**Spearman**	**0.624**	**0.00556**	**Yes**
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TSS**	**HPAH, Total**	**Spearman**	**0.591**	**0.00969**	**Yes**
Mainstem Combined	12	Storm	DOC	LPAH, Total	Spearman	0.0839	0.783	No
Mainstem Combined	12	Storm	Mean Flow	LPAH, Total	Spearman	-0.245	0.429	No
Mainstem Combined	12	Storm	Precipitation	LPAH, Total	Pearson	0.193	0.548	No
Mainstem Combined	12	Storm	TOC	LPAH, Total	Pearson	0.275	0.386	No
Mainstem Combined	12	Storm	TSS	LPAH, Total	Spearman	-0.259	0.402	No
Soos,Newaukum&Mill Creek	18	Storm	DOC	LPAH, Total	Spearman	0.352	0.148	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**Mean Flow**	**LPAH, Total**	**Spearman**	**-0.519**	**0.0269**	**Yes**
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	LPAH, Total	Spearman	-0.429	0.0743	No
Soos,Newaukum&Mill Creek	18	Storm	TOC	LPAH, Total	Spearman	0.387	0.11	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	TSS	LPAH, Total	Spearman	0.173	0.482	No
Mainstem Combined	12	Storm	Precipitation	Mean Flow	Spearman	-0.443	0.143	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	Mean Flow	Spearman	0.0889	0.717	No
Mainstem Combined	9	Storm	DOC	Naphthalene	Spearman	0.383	0.285	No
Mainstem Combined	9	Storm	Mean Flow	Naphthalene	Spearman	0.383	0.285	No
Mainstem Combined	9	Storm	Precipitation	Naphthalene	Pearson	-0.0354	0.928	No
Mainstem Combined	9	Storm	TOC	Naphthalene	Pearson	0.477	0.194	No
Mainstem Combined	9	Storm	TSS	Naphthalene	Spearman	0.133	0.709	No
Soos,Newaukum&Mill Creek	11	Storm	DOC	Naphthalene	Spearman	0.418	0.188	No
Soos,Newaukum&Mill Creek	11	Storm	Mean Flow	Naphthalene	Spearman	-0.464	0.141	No
Soos,Newaukum&Mill Creek	11	Storm	Precipitation	Naphthalene	Spearman	0.0729	0.818	No
Soos,Newaukum&Mill Creek	11	Storm	TOC	Naphthalene	Spearman	0.436	0.168	No
Soos,Newaukum&Mill Creek	11	Storm	TSS	Naphthalene	Spearman	0.373	0.245	No

Table D-1. Relationships Between Parameters - Correlation Analysis Results

Site	Count	Flow Condition	Parameter	Analyte	Correlation	R_s	p value	Significant?
Mainstem Combined	12	Storm	DOC	PCB, Total	Spearman	0.161	0.603	No
Mainstem Combined	12	Storm	Mean Flow	PCB, Total	Spearman	-0.021	0.215	No
Mainstem Combined	12	Storm	Precipitation	PCB, Total	Pearson	-0.438	0.154	No
Mainstem Combined	12	Storm	TOC	PCB, Total	Pearson	0.530	0.076	No
Mainstem Combined	12	Storm	TSS	PCB, Total	Spearman	0.161	0.603	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**DOC**	**PCB, Total**	**Spearman**	**0.649**	**0.00347**	**Yes**
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	PCB, Total	Spearman	-0.373	0.125	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	PCB, Total	Spearman	0.239	0.346	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TOC**	**PCB, Total**	**Spearman**	**0.74**	**0.000217**	**Yes**
Soos,Newaukum&Mill Creek	**18**	**Storm**	**TSS**	**PCB, Total**	**Spearman**	**0.731**	**0.000334**	**Yes**
Mainstem Combined	1	Storm	DOC	Pyrene	Spearman	n/a	n/a	No
Mainstem Combined	1	Storm	Mean Flow	Pyrene	Spearman	n/a	n/a	No
Mainstem Combined	1	Storm	Precipitation	Pyrene	Spearman	n/a	n/a	No
Mainstem Combined	1	Storm	TOC	Pyrene	Spearman	n/a	n/a	No
Mainstem Combined	1	Storm	TSS	Pyrene	Spearman	n/a	n/a	No
Soos,Newaukum&Mill Creek	3	Storm	DOC	Pyrene	Spearman	n/a	n/a	No
Soos,Newaukum&Mill Creek	3	Storm	Mean Flow	Pyrene	Spearman	n/a	n/a	No
Soos,Newaukum&Mill Creek	3	Storm	Precipitation	Pyrene	Spearman	n/a	n/a	No
Soos,Newaukum&Mill Creek	3	Storm	TOC	Pyrene	Spearman	n/a	n/a	No
Soos,Newaukum&Mill Creek	3	Storm	TSS	Pyrene	Spearman	n/a	n/a	No
Mainstem Combined	12	Storm	12HrBefore_Precipitation	TOC	Pearson	-0.45	0.142	No
Mainstem Combined	**12**	**Storm**	**Mean Flow**	**TOC**	**Spearman**	**0.797**	**0.000664**	**Yes**
Mainstem Combined	12	Storm	Precipitation	TOC	Pearson	-0.275	0.388	No
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	TOC	Pearson	-0.192	0.446	No
Soos,Newaukum&Mill Creek	18	Storm	Precipitation	TOC	Spearman	0.251	0.309	No
Mainstem Combined	**12**	**Storm**	**Mean Flow**	**TSS**	**Spearman**	**0.944**	**0.0000002**	**Yes**
Mainstem Combined	12	Storm	Precipitation	TSS	Spearman	-0.466	0.117	No
Soos,Newaukum&Mill Creek	18	Storm	Mean Flow	TSS	Spearman	-0.262	0.285	No
Soos,Newaukum&Mill Creek	**18**	**Storm**	**Precipitation**	**TSS**	**Spearman**	**0.49**	**0.0382**	**Yes**

*Non-detects for individual PAH compounds not included in correlation analysis.

*Bolded lines indicate statistically significant relationships ($p<0.05$)

Appendix D. Relationships Between Parameters – Flow Charts

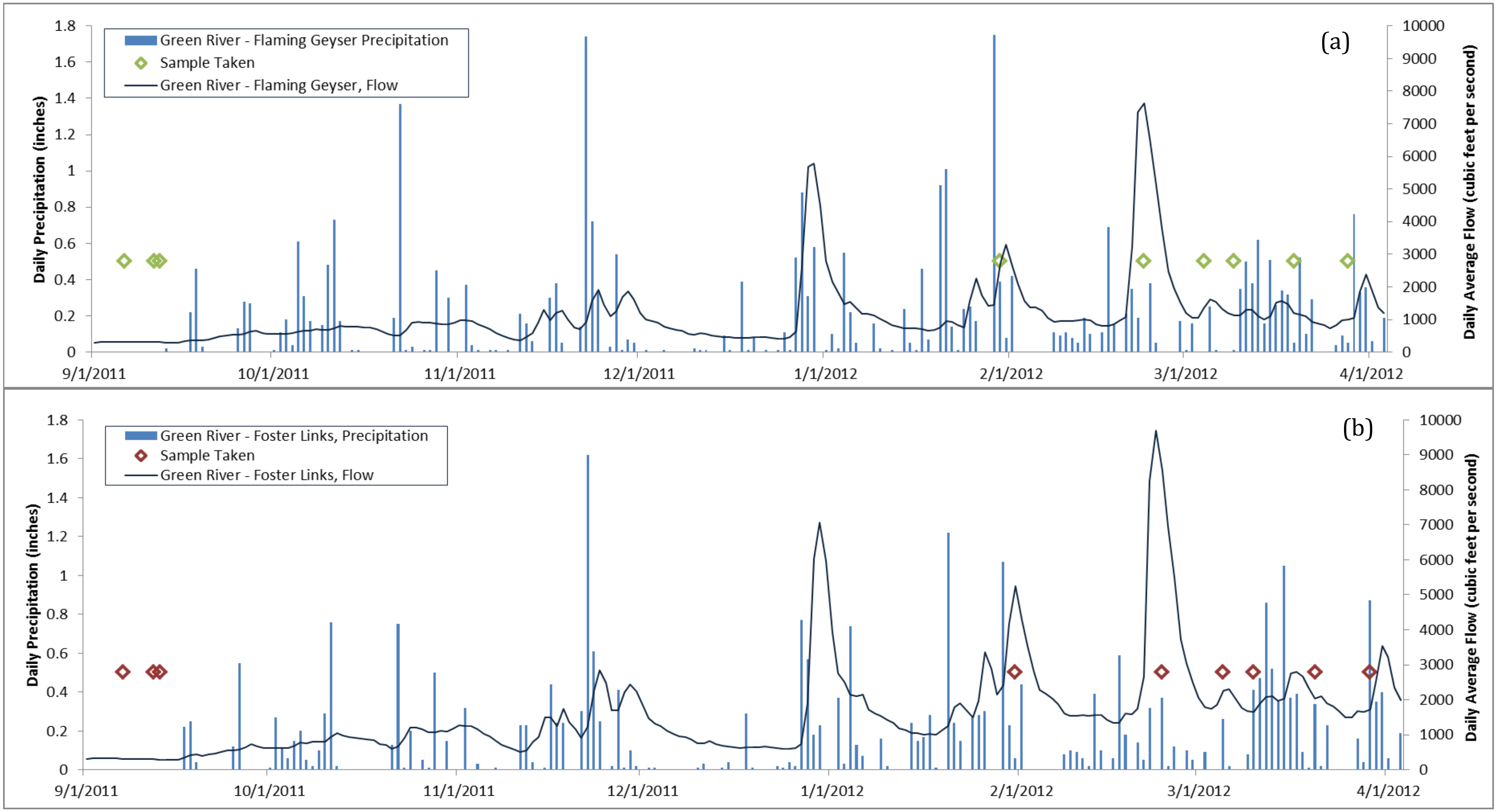


Figure D-1. Precipitation and Daily Average Flow over Time with Date of Sample Indicated: (a) Green River – Flaming Geyser, (b) Green River – Foster Links.

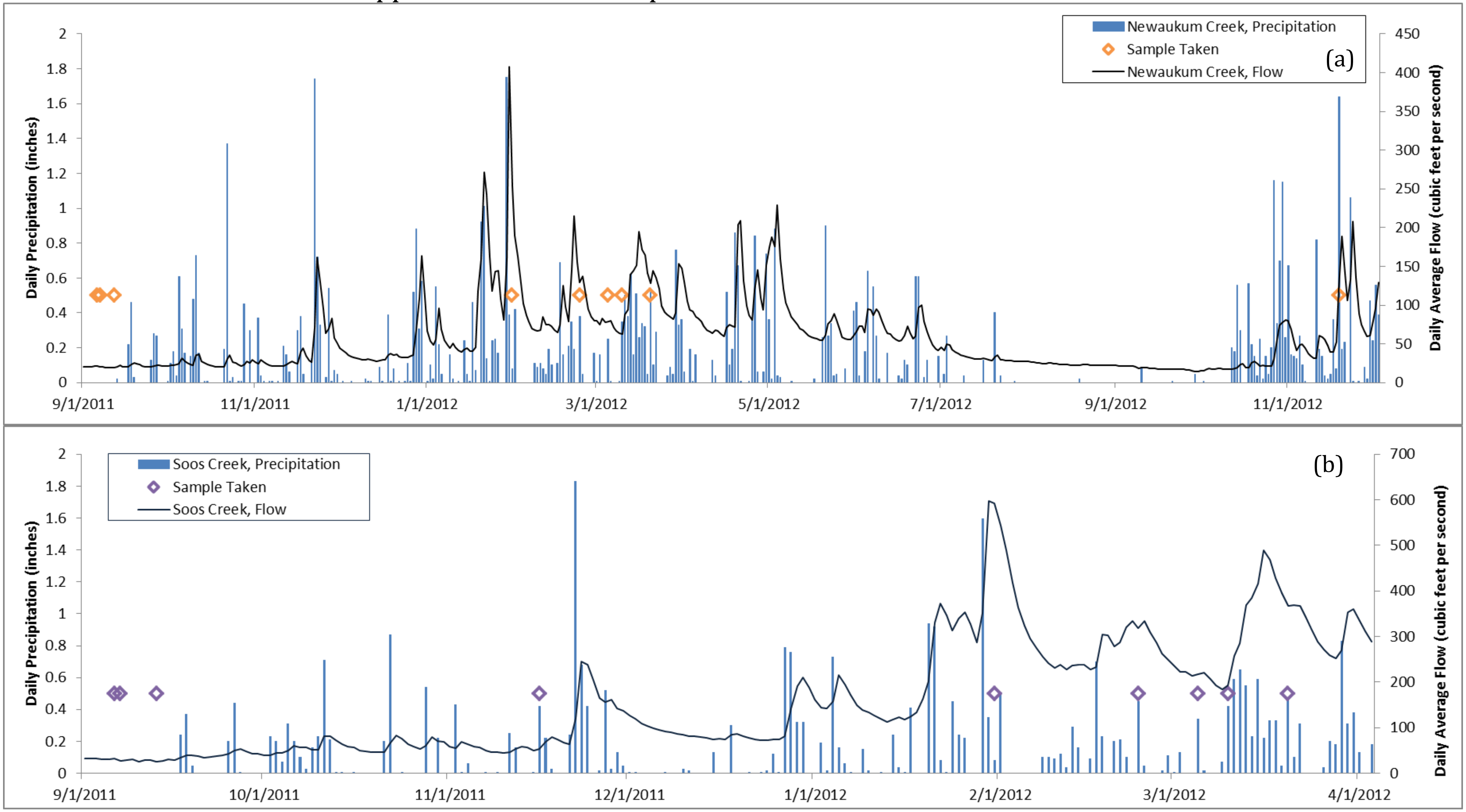


Figure D-2. Precipitation and Daily Average Flow over Time with Date of Sample Indicated: (a) Newaukum Creek and (b) Soos Creek.

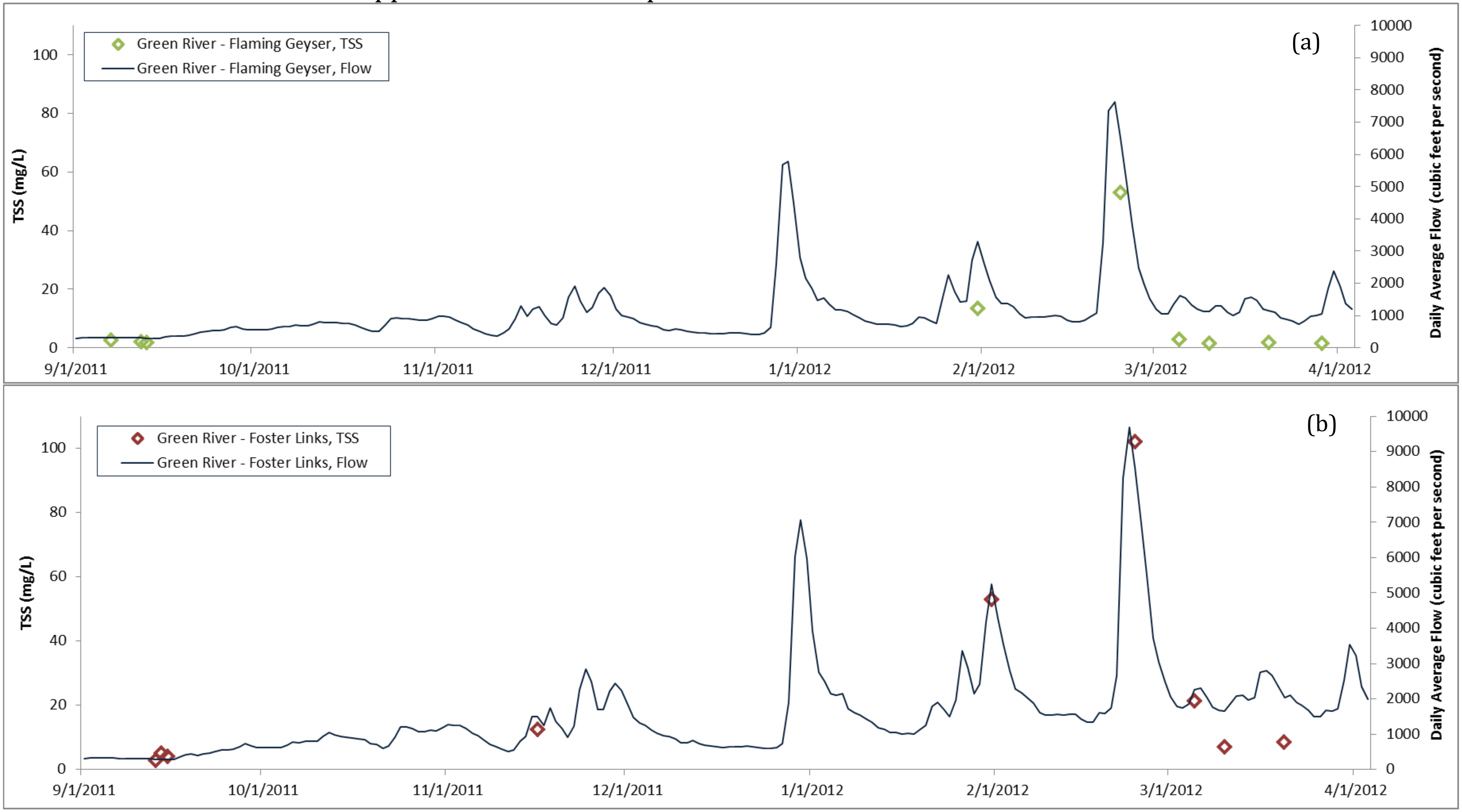
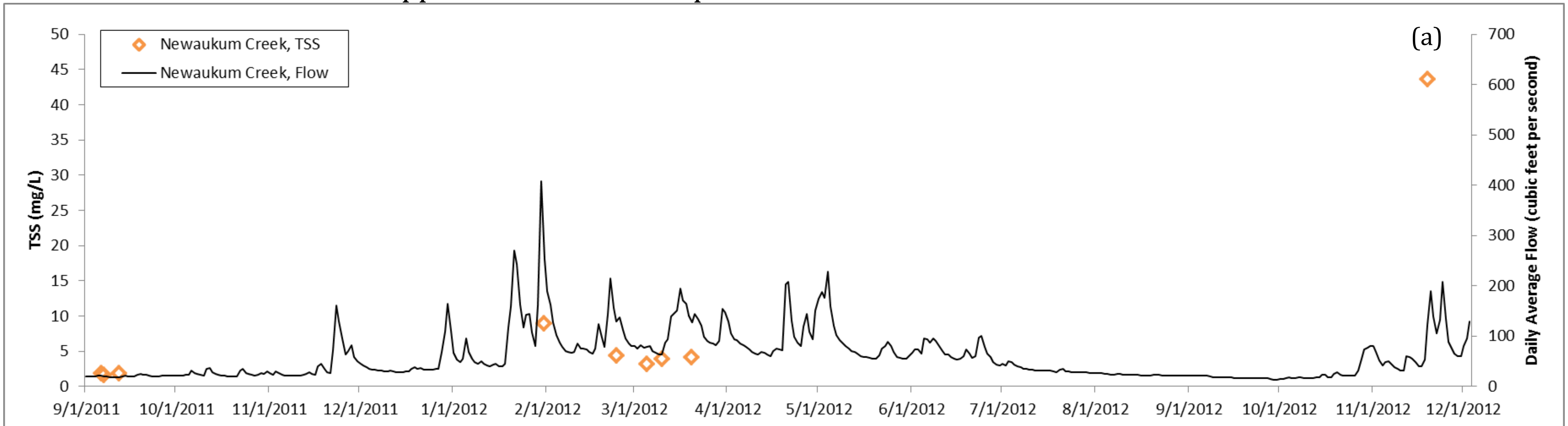


Figure D-3. TSS and Daily Average Flow over Time with Date of Sample Indicated: (a) Green River – Flaming Geyser, (b) Green River – Foster Links.



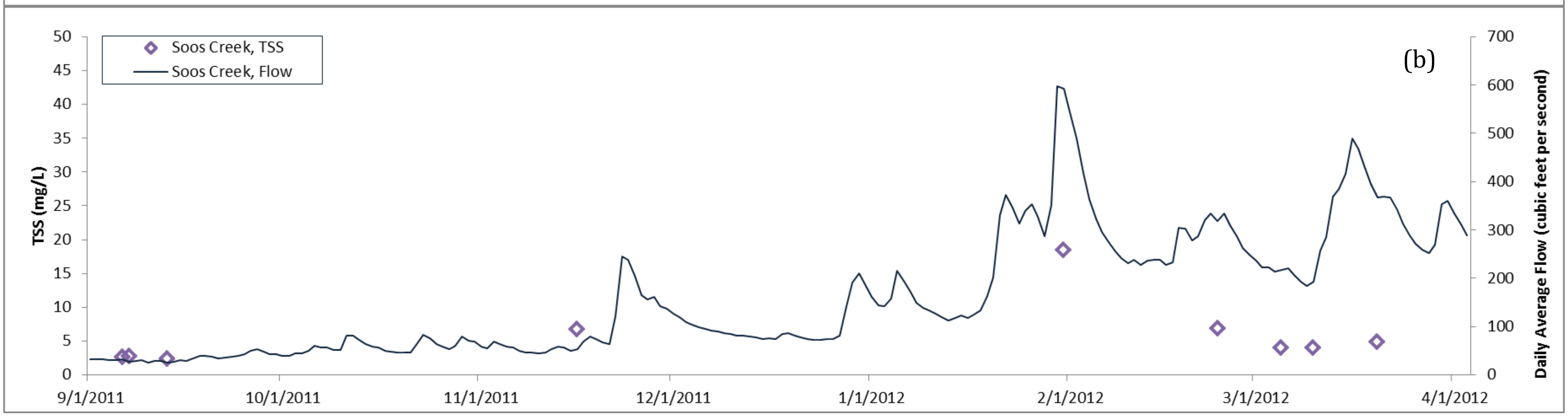


Figure D-4. TSS and Daily Average Flow over Time with Date of Sample Indicated: (a) Newaukum Creek and (b) Soos Creek.

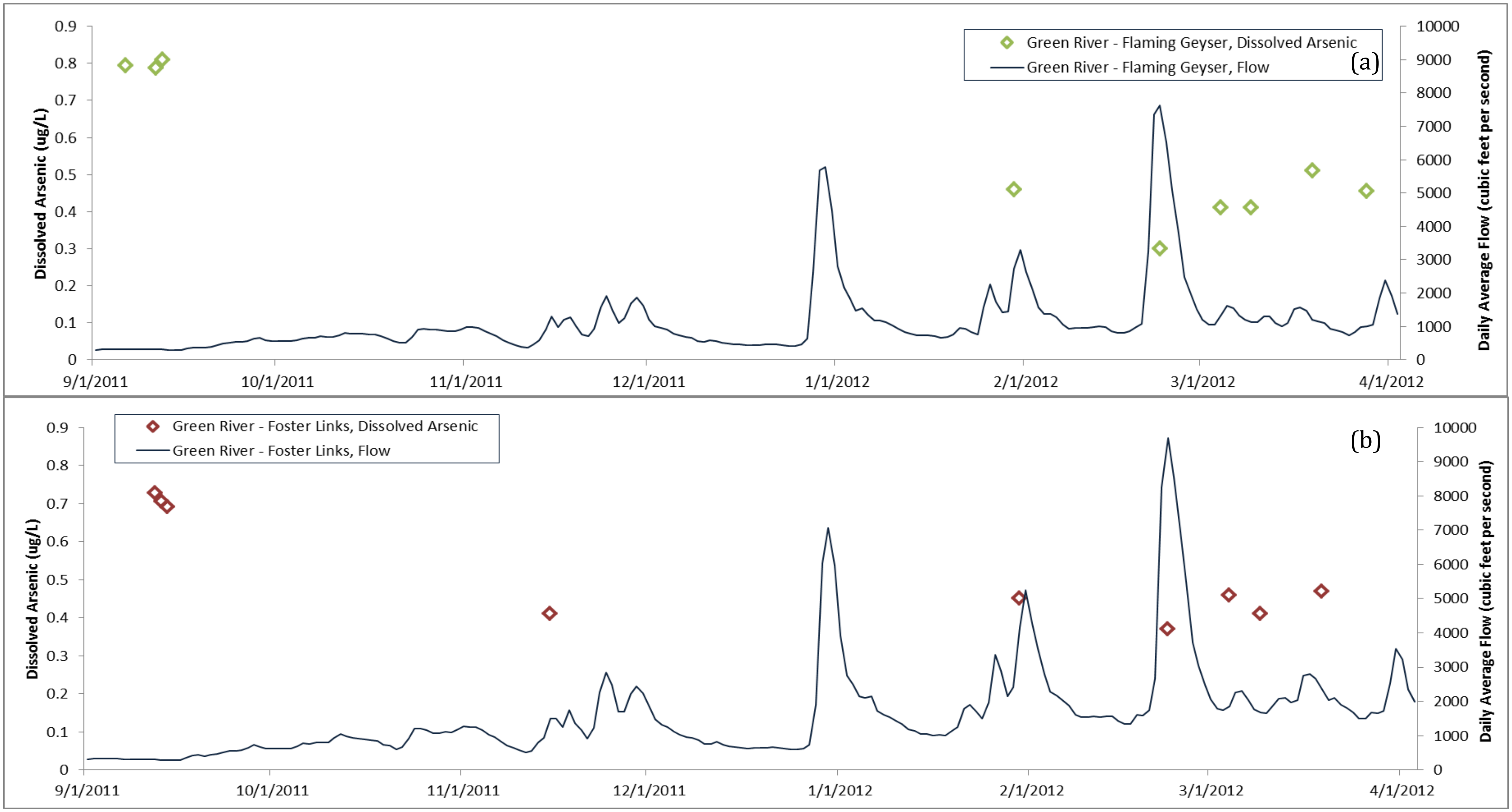


Figure D-5. Dissolved Arsenic Concentration and Daily Average Flow over Time with Date of Sample Indicated: (a) Green River – Flaming Geyser, (b) Green River – Foster Links.

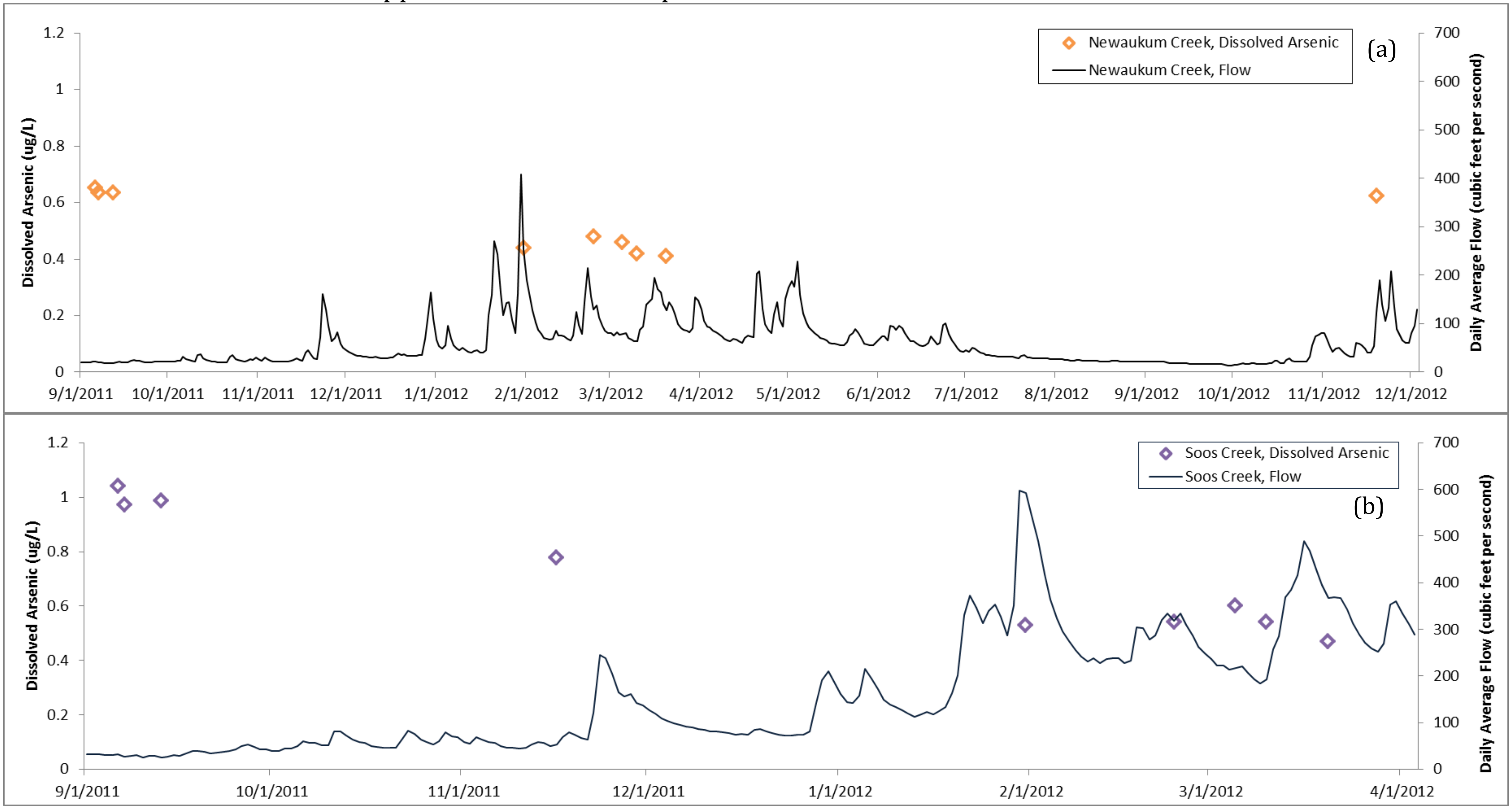


Figure D-6. Dissolved Arsenic Concentration and Daily Average Flow over Time with Date of Sample Indicated: (a) Newaukum Creek and (b) Soos Creek.

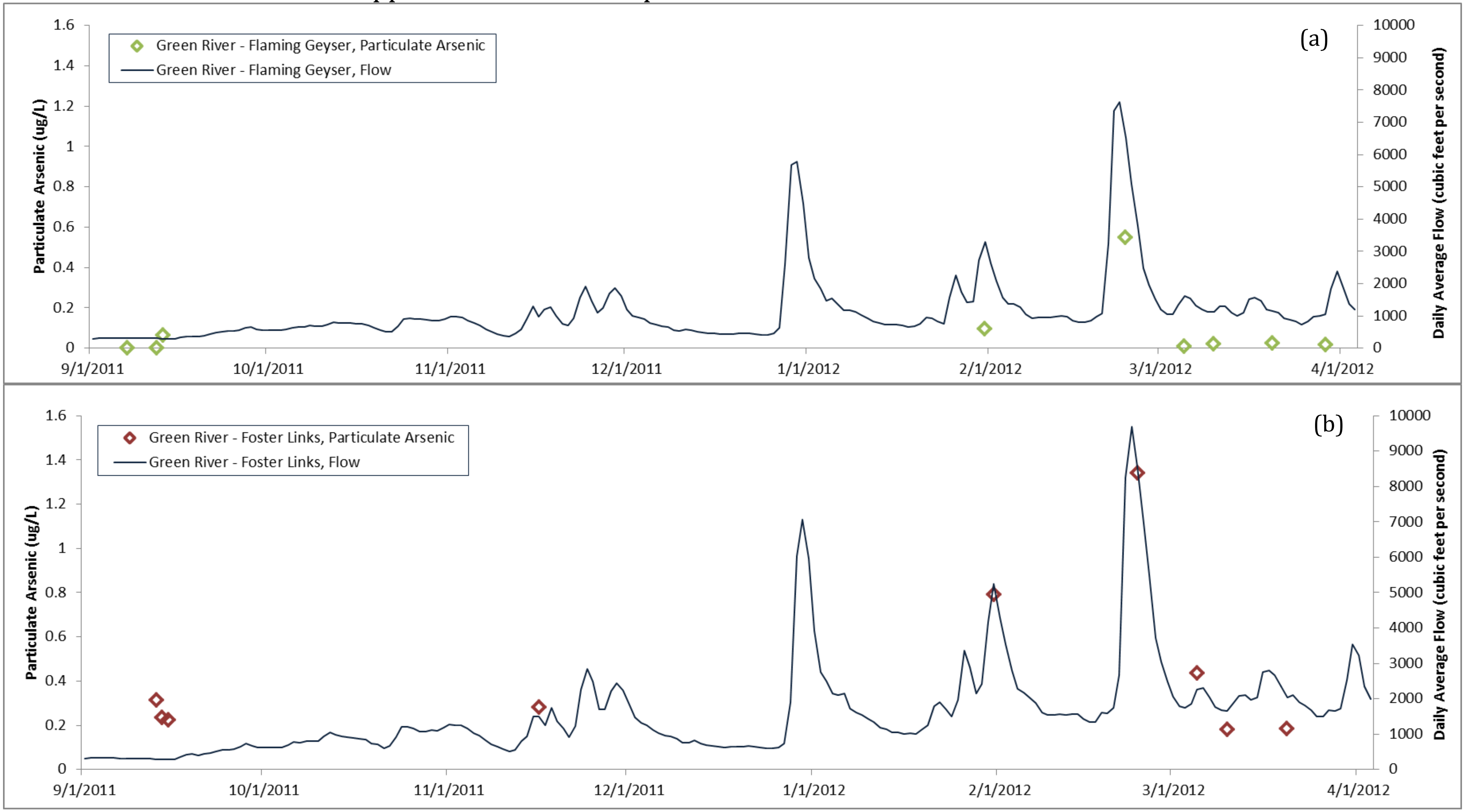
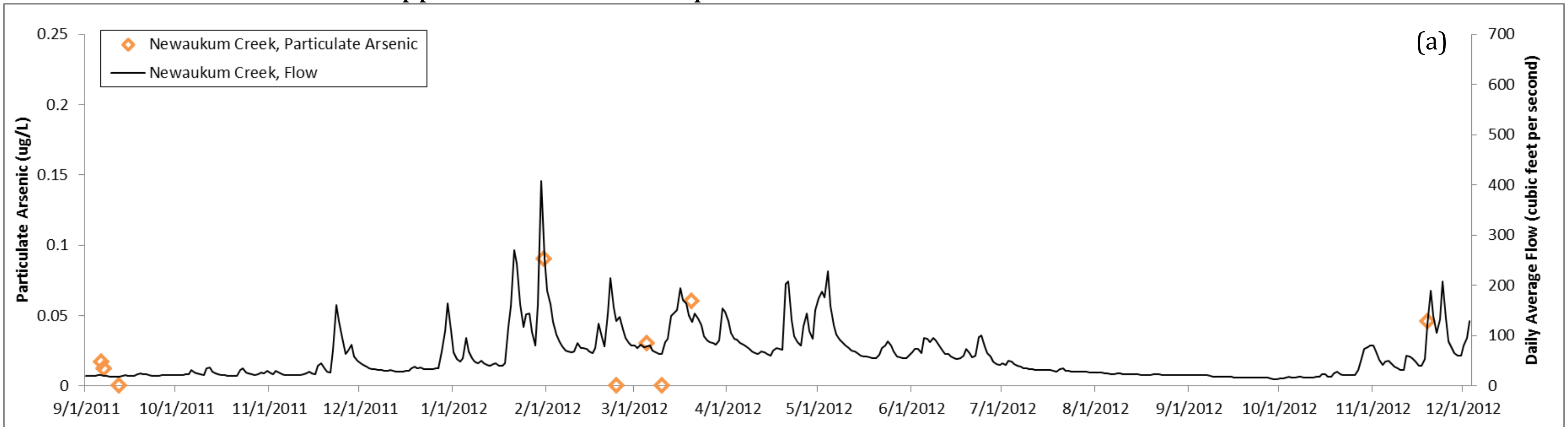


Figure D-7. Particulate Arsenic Concentration* and Daily Average Flow over Time with Date of Sample Indicated: (a) Green River – Flaming Geyser, (b) Green River – Foster Links.

**Particulate arsenic concentration estimated by subtracting dissolved arsenic concentration from total arsenic concentration.*



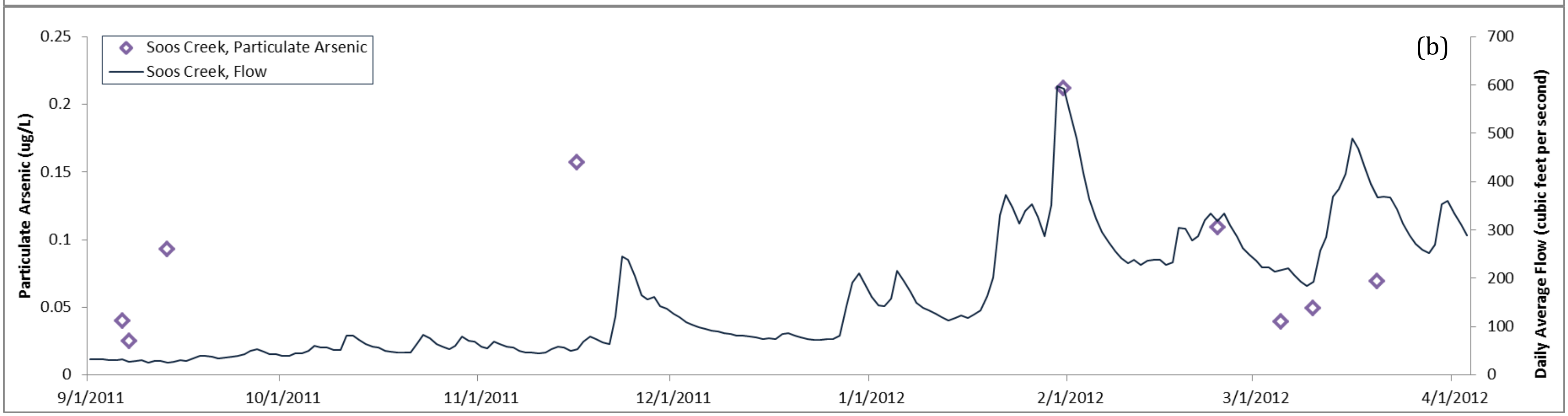


Figure D-8. Particulate Arsenic Concentration* and Daily Average Flow over Time with Date of Sample Indicated: (a) Newaukum Creek and (b) Soos Creek.

**Particulate arsenic concentration estimated by subtracting dissolved arsenic concentration from total arsenic concentration.*

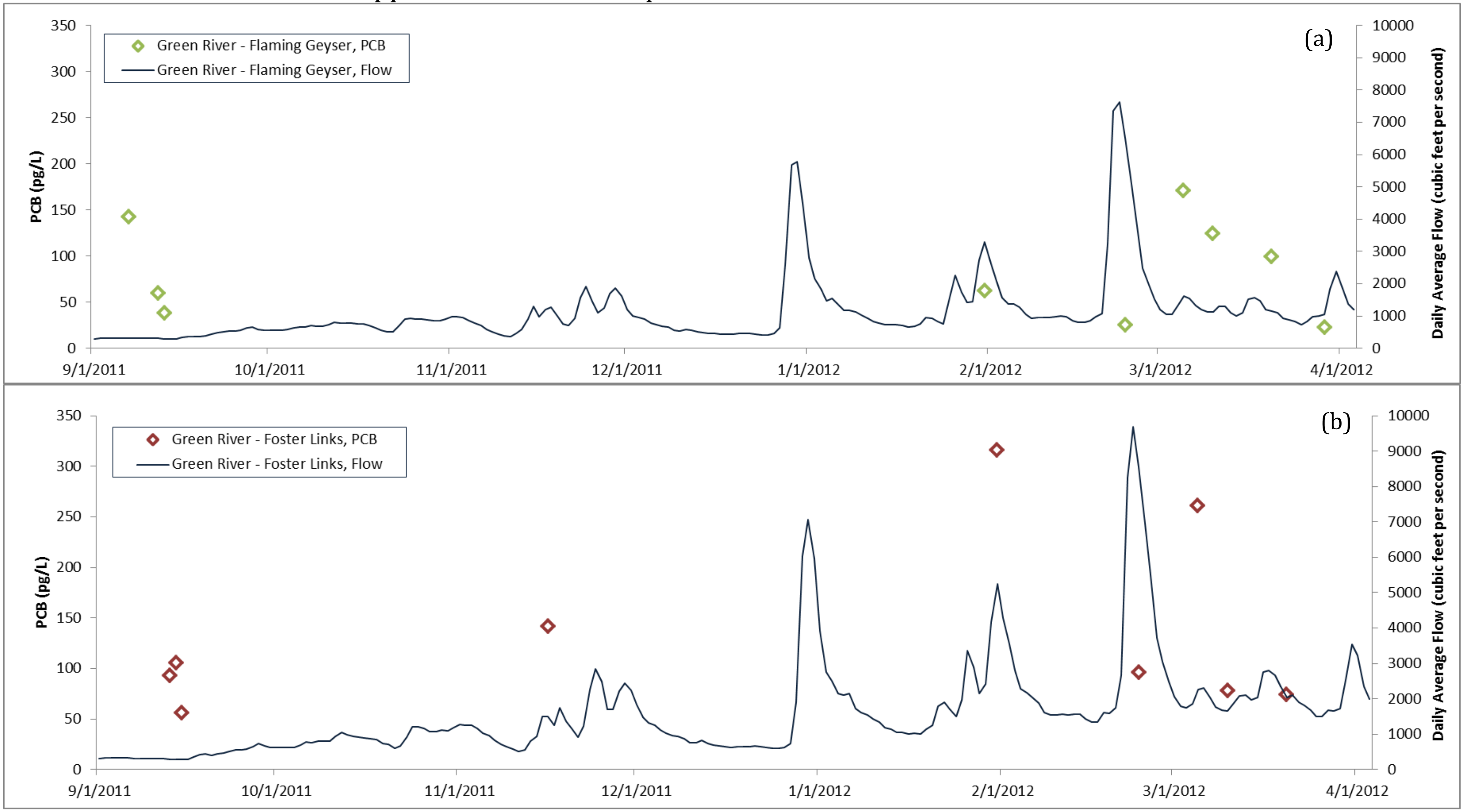


Figure D-9. Total PCB Concentration and Daily Average Flow over Time with Date of Sample Indicated: (a) Green River – Flaming Geyser, (b) Green River – Foster Links.

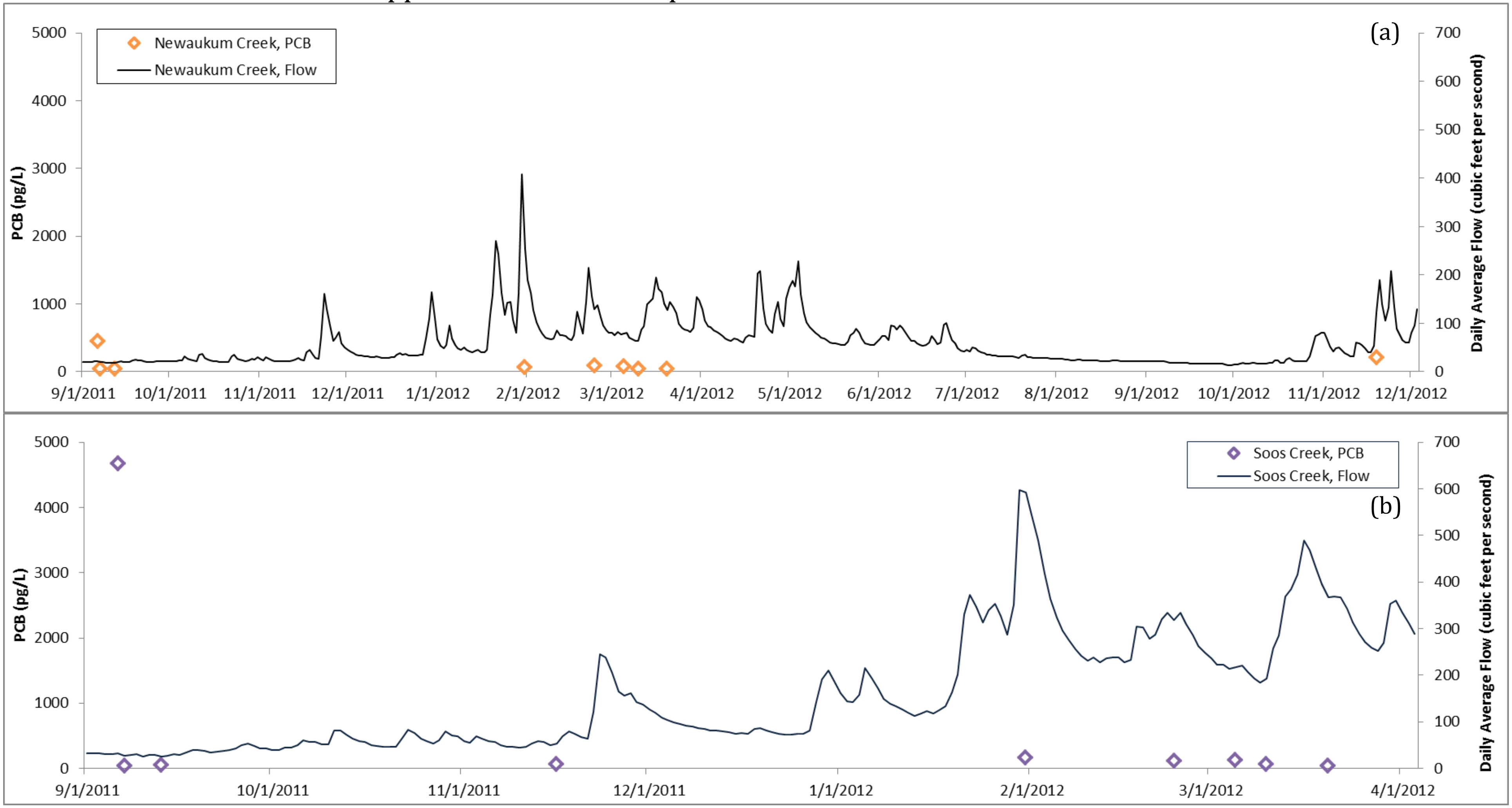


Figure D-10. Total PCB Concentration and Daily Average Flow over Time with Date of Sample Indicated: (a) Newaukum Creek and (b) Soos Creek.